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The Effects of a Job Evaluation Program on Salaries of Selected Nursing and Non-Nursing Positions in a Hospital

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THE EFFECTS OF A JOB EVALUATION PROGRAM ON SALARIES
OF SELECTED NURSING AND NON-NURSING
POSITIONS IN A HOSPITAL

School of

by

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A Thesis submitted to the Faculty of the Graduate
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This Thesis for the M.S. degree by
Frances Virginia Stimer
has been approved for the
School of
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The Effects of a Job Evaluation Program on Salaries of
Selected Nursing and Non-Nursing Positions in a
Hospital

Thesis directed by Assistant Professor Nona Pair

The problem was to determine whether, in a hospital where job evaluations were done, (1) nursing service salaries had increased; (2) the salary increases were comparable to increases for non-nursing positions; and (3) the increases were a result of the job evaluation program.

The study was done at the University of Colorado Medical Center where job analysis and job evaluation studies had been made in 1948 and 1957. Beginning salaries of six nursing service positions and twelve non-nursing positions for the years 1952 to 1962 were studied and compared. Each of the non-nursing positions had received the same beginning salary as the nursing service positions with which they were compared at some time during the ten-year period studied.

The historical review of the changes in beginning salaries for nursing service and non-nursing positions showed that nursing service salary increases were not comparable to increases in salaries for non-nursing positions. The study of the job evaluation program revealed that all nursing service positions studied were compensated

at a rate lower than the evaluated worth of the positions while only one of the non-nursing positions studied was compensated at a wage lower than the evaluated worth of the position. Several non-nursing positions were compensated at a rate higher than the evaluated worth at the time of evaluation yet were granted salary increases following the evaluation.

The findings indicated that job evaluation would have led to increased beginning salaries for nursing service positions if the hospital had based the salaries upon the evaluation. However, a community wage survey was the deciding factor in the wage determination for both nursing and non-nursing positions.

This abstract of about 250 words is approved as to form and content. I recommend its publication.

Signed *Nana M. Pair*
Instructor in charge of dissertation

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CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS USED

In the United States the ratio between supply and demand has affected prices whether the price be for goods or services. During the years since World War II, the available supply of nursing personnel has not matched the demand for their services. In 1948, Brown described a critical lack in both quantity and quality of nursing service.¹ Thirteen years later, a United States Department of Labor report stated that "the available supply still failed to match the mounting demand from the American people for more nurses."² However, this demand in excess of available supply has not had the effect of increasing nursing salaries relative to salaries paid other types of workers.

The foreword of the United States Department of Labor report stated that "in the search for ways to obtain additional nursing personnel, we must not underestimate the influence of wage levels and working conditions."³ Nursing

¹Esther Lucile Brown, Nursing for the Future (New York: Russell Sage Foundation, 1948), pp. 8-10.

²United States Department of Labor, Women's Bureau, Nurses and Other Hospital Personnel Their Earnings and Employment Conditions (Washington: United States Government Printing Office, 1961), p. 1.

³Ibid., p. 1.

leaders and others considered that increased salaries and improved working conditions were needed to attract persons to nursing.⁴

During the same years, leaders in the hospital industry had recognized the need for higher salaries and improved working conditions for all hospital personnel.⁵ Hospitals had become a major industry competing with business and manufacturing for qualified personnel. Wage and salary scales began to be reconstructed. In an attempt to adjust salaries, some hospitals turned to job analysis and job evaluation programs as a means of developing a sound, rational wage structure.⁶

The University of Colorado Medical Center had used a job evaluation program to prepare a wage and salary plan in 1948.⁷ The classification system, established after the job evaluation, had been used by the Medical Center since

⁴Ibid., p. 2; and Samuel J. Gelman and Joseph B. Smolens, "How to Find Nursing Staff for 80,000 New Beds," The Modern Hospital, 98:96, June, 1962.

⁵Norman D. Bailey, Hospital Personnel Administration, Second edition (Berwyn, Illinois: Physicians' Record Company, 1959), p. 137.

⁶Ibid., pp. 137, 138; and Sidney Lewine, "Annual Administrative Reviews: personnel," Hospitals, J.A.H.A., 35:140, April 16, 1961.

⁷University of Colorado Position Classification Plan (A Report Prepared by the Public Administration Service of Chicago, 1948). (Duplicated.)

that time.⁸ A second job analysis and job evaluation study was made at the Medical Center in 1957.⁹

I. THE PROBLEM

Statement of the problem. The problem was to determine whether: (1) nursing service salaries had increased during the years 1952 to 1961 at the University of Colorado Medical Center; (2) nursing service salaries had increased in amounts comparable to other positions; and (3) the identified increases were a result of the job evaluation program.

Purposes. The purposes of the study were:

1. To identify changes in beginning salaries for nursing service positions that had occurred under the job classification program at the Medical Center
2. To show changes that had occurred in relationships between nursing service positions and other selected hospital positions
3. To determine the effects of the job evaluation

⁸Throughout the remainder of this thesis, the term "Medical Center" shall mean the University of Colorado Medical Center, Denver, Colorado. The Medical Center included Colorado General Hospital, Colorado Psychopathic Hospital, The University of Colorado School of Nursing and the University of Colorado School of Medicine.

⁹University of Colorado Medical Center Position Classification Plan, 1957. (Duplicated.)

program upon salaries and the relationship between salaries paid for selected positions.

4. To identify factors other than job evaluation which had influenced salary changes.

Hypothesis. Although there was no difference between the method of job evaluation and wage determination for nursing service positions and non-nursing positions during the ten years from 1952 to 1962 at the University of Colorado Medical Center, the percentage of increase in beginning salaries had not been equal.

Need for the study. The reports of job evaluation programs that had appeared in hospital magazines described some methods of evaluation used and the final salary schedules.¹⁰ These reports did not show whether the job evaluation program had led to increased salaries for nurses. This study would show whether nursing salaries had increased at the Medical Center as a result of the 1957 job analysis and job evaluation.

If the study revealed that the Medical Center wage and salary program had led to marked improvement in nursing salaries both in amount and in relationship to salaries for

¹⁰Lester M. Bornstein and J. A. Rosenkrantz, "This Wage and Salary Program is Easy to Apply," Hospitals, J.A.H.A., 35:32, April 1, 1961; and C. G. Davis, "Fair Starting Wages Turned the Key to a Sound Wage Program," Hospitals, J.A.H.A., 34:34, June 16, 1960.

comparable positions, the information could be used in several ways. Some possible uses of the study were to provide information for: (1) present and prospective employees at the Medical Center and other institutions where similar plans were used; (2) hospital administrators who wished to institute a wage and salary program based on job analysis and job evaluation; (3) recruitment of nursing students; and (4) encouraging non-active nurses to return to active practice. No other studies were found which provided information about the effects of a wage and salary program on nursing salaries over a period of time.

If, conversely, the study showed that the nursing salaries had not increased in proportion to other salaries, the factual information could be used to show inequities and the need for improvement.

Reports about hospital personnel administration indicated that interest in wage and salary administration had increased because hospital management was concerned about, and opposed to, unionization of employees.¹¹ One writer stated that "the collective bargaining objectives of the American Nurses' Association are hardly more palatable to administrators than those of the recognized unions."¹² In

¹¹Lewine, op. cit., p. 138.

¹²Mortimer W. Zimmerman, "Personnel Administration," Hospitals, J.A.H.A., 36:129, April 16, 1962.

some instances, wage and salary programs which utilized job analysis and job evaluation were offered as a substitute for collective bargaining. If such programs were legitimate substitutes for collective bargaining, it was expected that a study of a wage and salary program which utilized those methods would show that nursing salaries had been improved by the evaluation.

Limitations and scope of study. The study was limited to the historical review of the wage and salary plans of the University of Colorado Medical Center for the years 1952 through 1961. Beginning salaries of six nursing service positions were studied and compared with twelve non-nursing positions. The 1957 Job Classification Study was reviewed to ascertain its effects upon the salaries of these eighteen positions.¹³

II. DEFINITIONS OF TERMS USED

Position. A position was any physical or mental work, service or duties performed by an individual employee. The terms "position" and "job" were considered to be identical in meaning for the purposes of this study.

Job classification. Job or position classification

¹³"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leotal Pekrul and Otis Lipstreu, 1957).

was the identification of specific jobs within an occupational group. For example, Hospital Attendant was one job class within the occupational group of Nursing Service. Jobs were separated and individually defined according to job content considering such factors as duties, education or training required, experience required, and responsibilities.

Position or job description. A position or job description was a written statement of the content and requirements of an individual job class. The position descriptions for the Medical Center contained a definition of the positions, examples of work, recommended qualifications, and any necessary special requirements such as registration for nurses.¹⁴

Job analysis. Job analysis was "the process of gathering information and determining the component elements of a job by observation and study."¹⁵ The analysis involved "analyzing and recording all the details concerning the training, skills, required efforts, qualifications, abilities, experiences, and responsibilities expected of a

¹⁴University of Colorado Medical Center Position Classification Plan, 1957. (Duplicated.)

¹⁵Adolph Langsner and Herbert G. Zollitsch, Wage and Salary Administration (Cincinnati: South-Western Publishing Company, 1961), p. 242.

worker to perform a job satisfactorily."¹⁶

Job evaluation. Job evaluation was the process of determining the worth of a job in terms of wages to be paid. It was "the over-all activity involving an orderly, systematic method and procedure of ranking, grading, and weighting of jobs to determine the value of a specific job in relation to other jobs."¹⁷

Factor. A factor was an element which was considered to be of importance in evaluating and comparing jobs. For example, one factor considered in the 1957 Job Classification Study at the Medical Center was the minimum amount of education required for a beginning worker on each job.¹⁸

Weighted-in-points plan. A weighted-in-points plan was a method of job evaluation in which each factor was divided into a number of degrees and a number of points assigned to each degree. For example, the study at the Medical Center used six degrees for each factor. The factor "education required" was weighted-in-points as follows:
(1) first degree, grammar school education or equivalent, fifteen points; (2) second degree, two years of high school or trade school, or equivalent, twenty-five points;

¹⁶Ibid.

¹⁷Ibid., p. 128.

¹⁸"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver," p. 33.

(3) third degree, graduation from high school, business school, or equivalent, thirty-five points; (4) fourth degree, two years of college training or equivalent, with courses applicable to duties, forty-five points; (5) fifth degree, college or university degree or equivalent, with training in a specialized field applicable to duties, sixty points; and (6) sixth degree, college or university degree plus one or more years of study related to the duties of this position, eighty points.¹⁹

Pay grade. A pay grade was a numerical designation for a salary range on the Medical Center pay scale. For example, pay grade seven designated the salary range with a beginning salary of \$220 and a maximum salary of \$295 in the 1961 pay plan.²⁰

Beginning salary. The first designated salary of a pay range was the beginning salary. The beginning salary was also known as the wage-base-rate.

Wage and salary program. The wage and salary program involved "planning, developing, directing, and controlling all phases of employee compensation and methods of remuneration."²¹

¹⁹Ibid., p. 34.

²⁰"University of Colorado Medical Center Staff Classification and Pay Plan," July 1, 1961, Schedule B, p. 1. (Mimeographed.)

²¹Langsner and Zollitsch, op. cit., p. 1.

Collective bargaining. Collective bargaining was the "process whereby representatives of employees negotiate with employers to obtain a signed contract covering salaries, hours, and other terms of employment mutually agreeable to employees and the employer."²²

Professional position. Professional positions at the Medical Center included "all classified positions having a general scope of duties and responsibilities which required professional training of university grade."²³

Administrative position. Administrative positions at the Medical Center included "all classified positions having duties and responsibilities which involve administration and supervision in the management and direction of a department or a major division of a department."²⁴

III. ORGANIZATION OF REMAINDER OF THESIS

Chapter II contains a review of the literature regarding wage and salary programs, their use in hospitals and their effect upon nursing service salaries. Chapter III is a description of the methodology used in collecting data

²²"A Glossary of Industrial Relations Terms," prepared by the staff of the Economic Security Unit, American Nurses' Association, The American Journal of Nursing, 61:97, March, 1961.

²³"Staff Personnel Policies of the University of Colorado" (Revised 1959). Section 2.1.1.

²⁴Ibid., Section 2.1.2.

and preparing the thesis. Chapter IV includes (1) a brief history covering major changes in the wage and salary program at the University of Colorado Medical Center, (2) a comparison of nursing service beginning salary changes to changes in beginning salaries of other selected positions at the Medical Center, and (3) a discussion of the 1957 job analysis and job evaluation study at the Medical Center with its effects upon beginning salaries for the selected positions studied. Chapter V is the summary of findings, conclusions and recommendations for further study.

CHAPTER II

REVIEW OF LITERATURE

The review of literature was divided into three phases. The first phase was a review of literature about wage and salary administration, job analysis and job evaluation to determine methods used in industry. The second phase was a review of hospital literature in which information was sought regarding application of industrial methods of wage and salary administration to hospitals. The third phase was a review of nursing literature to find references regarding the effect wage and salary programs have had upon nursing service salaries.

I. WAGE AND SALARY PROGRAMS IN INDUSTRY

Wage and salary administration has been defined as:

A management function that involves planning, developing, directing and controlling all phases of employee compensation and methods of remuneration. It aims to compensate each employee adequately and equitably as a basis for satisfactory employer-employee relations.¹

Information was sought about methods used by industry to determine (1) the value of an individual job and (2) the adequate and equitable wage for the job.

Methods of job evaluation. Methods used in job

¹Adolph Langsner and Herbert Zollitsch, Wage and Salary Administration (Cincinnati: South-Western Publishing Company, 1961), p. 1.

evaluation in industry had varied from a simple ranking according to the worth of a total job to a weighted-in-points method of evaluation.²

Ranking, the simplest and the oldest method used to determine the value of a job, was considered to be extremely subjective with no definite structural basis.³ It consisted of a study of the jobs in an industry in which all jobs were ranked in order according to their importance to the industry. The wages assigned depended largely on "going" salaries for similar jobs.⁴ This method was used successfully in small shops and offices.

The job classification method or job grading method grew out of the ranking method. Rather than ranking all positions in an industry in order of importance, a number of predetermined classes or grades were selected. Jobs or positions were then analyzed and placed into the classes or grades.⁵ Thus an industry with seventy-five jobs which would have had seventy-five job ranks under the ranking method could set up a classification method with twenty classes or grades and assign the seventy-five jobs to the

²Charles W. Lytle, Job Evaluation Methods (New York: The Ronald Press Company, 1946), pp. 32-50.

³Langsner and Zollitsch, op. cit., p. 146.

⁴Ibid.

⁵Ibid., pp. 146-150.

twenty classes. Classification placed no limit on the number of positions in each class.

A factor-comparison method of job evaluation was introduced in 1926. In this method, several key jobs that represented a cross section of all jobs in the industry were selected for initial study. The key jobs were analyzed and comparisons were made on five factors: (1) mental requirements, (2) skill requirements, (3) physical requirements, (4) responsibility, and (5) working conditions. After determining the relative value of the factors for an individual key job, the current wage for the job was divided among the five factors. For example, a position currently receiving one dollar an hour might have had a factor comparison which indicated that the mental requirements were worth ten cents an hour, the skill requirements worth fifty cents an hour, etc. The money values assigned factors in key jobs served as a guide for evaluating all other jobs in the industry.⁶

The fourth method of job evaluation was the point method. The point method differed from the factor-comparison method in that it did not limit the number of factors used for evaluation. Skill, effort, responsibility and job conditions were four widely accepted factors which had

⁶Ibid., pp. 150-153.

been further subdivided into several other factors according to the complexity of jobs being studied. Once the factors which were to be considered in a job evaluation had been determined, each factor was divided into several degrees.⁷ In a straight point method, all factors used were considered to be of equal importance. In a weighted-in-points method, the number of points varied according to the relative importance of the factor in relation to the other factors.⁸ Thus the first degree of the factor "skill" may have had more assigned points than the first degree of the factor "effort" because in the industry where jobs were being evaluated skill was considered more important than the effort required to perform the job.

Langsner and Zollitsch stated that the point method had gained the widest acceptance as a means of job evaluation.⁹ In a discussion of the advantages of the point method, they said:

The point method is being recognized as less subjective in rating than any other method, since definition of subfactors and the division into clearly defined degrees are its main features. The basic factors lend themselves to subdivisions that are small enough without being too narrow in their interpretation, and large enough not to

⁷See example given on pages

⁸Langsner and Zollitsch, op. cit., pp. 154-157.

⁹Ibid., p. 156.

be cumbersome or inflexible. Division of the basic factors into five to eight degrees permits the rater to judge quickly, nevertheless carefully, to avoid discriminations and inequities.

By evaluating the job independently of money rates, the analyst or rater is not influenced by any pressure from unions, workers, or management. After the number of points has been assigned a job on an equitable rating, the number remains static until the job is changed. Bargaining for wage-base-rates is easily accomplished since the job evaluation continues as a measuring stick.¹⁰

These four methods of job evaluation, ranking, classification, factor-comparison and point method, had been used in industry to evaluate jobs and arrive at wage and salary rates.

Process of job evaluation. What steps were followed by industry when a job evaluation was done? Belcher listed the following five steps:

1. Through the process of job analysis, facts regarding the duties and responsibilities of the job are obtained, together with information regarding worker requirements for successful performance of the job.
2. The next step in job evaluation is deciding what the organization "is paying for" and consists of determining what factor or factors place one job at a higher level in the job hierarchy than another, and thus at a higher rate of pay.
3. The third step in job evaluation involves either developing or choosing a system for appraisal of the jobs in the organization

¹⁰Ibid., p. 158.

according to the factor or factors chosen.

4. The fourth step is making use of the system to evaluate jobs.
5. The final step is pricing the job structure to arrive at a wage structure.¹¹

Michael did the job analysis after he had established the factors by which jobs would be evaluated. Michael also suggested that job values determined by evaluation should be compared to currently paid wages. He believed that the evaluation should be reviewed if marked differences were found between current wages and the job values established by evaluation.¹²

Langsner and Zollitsch listed fourteen steps in job evaluation. The first nine steps were preparation for the analysis of jobs. They emphasized the need for obtaining total cooperation beginning with top management and including the workers and union members. Preparation of an occupational classification, decision on the number of factors with definitions for each degree of the factors, and preparation of a manual to be used in job analysis and rating preceded the actual analysis of the jobs. After the jobs had been analyzed and job descriptions written, money

¹¹David W. Belcher, Wage and Salary Administration (New York: Prentice-Hall, Inc., 1955), pp. 130-132.

¹²Lionel B. Michael, Wage and Salary Fundamentals and Procedures (New York: McGraw-Hill Book Company, Inc., 1950), pp. 85, 86.

values were assigned to the jobs in accordance with union agreements or a wage survey.¹³

Wage determination. The goal of job evaluation in a wage and salary program was to determine the wages which would adequately and equitably compensate the individual employee.¹⁴ What determined the amount of money paid for a specific job? Belcher said that:

Wage level determination for a specific organization is a decision-making process. The decision is reached unilaterally in the case of the nonunion employer, at the bargaining table in the case of the union employer. In either case, a number of factors influence the decision reached. . . .¹⁵

Belcher believed that comparative wage rates probably had the greatest influence on wages.¹⁶ Langsner and Zollitsch stated that both unions and management have used a wage survey of comparable jobs in similar industries to help in determining their own beginning salaries.¹⁷ They listed as part of the process of evaluation the assignment of money values to jobs "in accordance with union agree-

¹³Langsner and Zollitsch, op. cit., pp. 170,

¹⁴Ibid., p. 1.

¹⁵Belcher, op. cit., p. 120.

¹⁶Ibid.

¹⁷Langsner and Zollitsch, op. cit., p. 287.

ments or wage surveys."¹⁸

In addition to comparative wage rates, Belcher listed six other criteria which influenced wages. These were: (1) cost of living, (2) ability to pay, (3) productivity, (4) union pressures and union scales, (5) labor supply, and (6) purchasing power.¹⁹ When they discussed the assignment of a definite salary to an evaluated supervisory position, Langsner and Zollitsch listed the following factors which would affect the wages:

. . . what the labor supply and demand are; what competitors are paying; the profitability of the business; geographical location; how important the job is; and what compensation is being received for jobs above and below the supervisors level.²⁰

The wage and salary programs in industry have become very complex. They have progressed from a comparatively simple ranking of jobs to a program of job analysis and job evaluation which leads to wage determination. Could these procedures be adapted to the hospital industry to provide a wage and salary program for hospital personnel?

II. WAGE AND SALARY PROGRAMS IN HOSPITALS

The use of organized wage and salary programs in

¹⁸Ibid., p. 170.

¹⁹Belcher, op. cit., p. 120.

²⁰Langsner and Zollitsch, op. cit., p. 641.

hospitals appeared to have increased in recent years. Several reasons for the use of newer techniques for wage determination in hospitals were identified. Problems that were unique to the hospital field were also discussed in the literature reviewed.

Introduction of wage and salary programs in hospitals. In September 1956, the House of Delegates of the American Hospital Association approved policies on "Hospital Management-Employee Relations" which said in part:

Modern hospital management is striving to provide for all employees compensation, working conditions and other personnel practices at least at levels prevailing for equivalent work in the community.²¹

Among the specific personnel practices listed in the policies was a statement that hospitals strive to make it a practice to apply tested methods for the setting of proper salaries and wages for jobs.²²

Lewine commented in a 1957 American Hospital Association report on personnel that increased interest in wage and salary administration had produced increased interest in job evaluation.²³ He also stated that these techniques

²¹American Hospital Association, "An American Hospital Association Statement on Hospital Management-Employee Relations," (Chicago: American Hospital Association, Personnel Relations Series, Number 1, March 1957).

²²Ibid.

²³Sidney Lewine, "Personnel," Hospitals, J.A.H.A., 32:78, April 16, 1958.

were not new to hospitals but that previous experience had shown either a "bogging down" or a "start and stop" progression.²⁴

It appeared that the concept of wage and salary administration which included a program of job analysis and job evaluation was not new to the hospital field but was a concept that had received increased attention in the past five to ten years.

Reasons for introduction of programs. Bailey attributed the growth of the interest of hospitals in the wage and salary program to the increased recognition of the fact that hospital salaries were lower than those of industry and to the recognition of hospitals as a major industry.²⁵ Lewine pointed to the threat of union activity which he considered an impelling force for action on the part of hospitals.²⁶ During 1959 many hospital administrators had changed their approach to unionization.

This more mature approach has included the acceptance of the fact that opposition to collective bargaining rights for hospital employees imposes on the hospital employer an even greater

²⁴Ibid.

²⁵Norman D. Bailey, Hospital Personnel Administration (Berwyn, Illinois: Physicians' Record Company, 1959), p. 137.

²⁶Sidney Lewine, "Annual Administrative Reviews: personnel," Hospitals, J.A.H.A., 35:138, April 16, 1961.

responsibility to maintain proper wage schedules and personnel practices. . . .²⁷

The literature revealed that growth of the hospital industry, recognition of sub-standard wage rates in hospitals and the threat of union activity were among the factors which had influenced a growing interest in wage and salary programs among hospital administrators.

Problems unique to hospitals. Bailey outlined a program of job analysis, job evaluation and wage determination for hospitals that was very similar to the industrial programs.²⁸ However, he pointed out the following problems within the hospital field: (1) the wide range of jobs in hospitals increased the number of individual analyses, (2) there was no standard nomenclature for hospital positions so that job titles did not necessarily define job content, (3) jobs varied according to location, size, and type of hospitals, (4) smaller hospitals often combined jobs, (5) there were no established standards of production, (6) there was a proliferation of jobs in hospitals which were not related to other jobs, and (7) demand for service was unpredictable.²⁹

Another major difference between hospitals and most

²⁷Ibid., p. 140.

²⁸Bailey, op. cit., pp. 170, 171.

²⁹Ibid.

industries was the higher ratio of professionally educated and highly trained personnel to unskilled personnel needed in a modern hospital.³⁰

In spite of the problems, some hospitals reported installation of wage and salary programs in which they had used methods similar to those used in industry.³¹ Some of the hospitals used a modification of the industrial method because of the cost of an extensive job evaluation.³²

III. THE EFFECT OF WAGE AND SALARY PROGRAMS UPON NURSING SERVICE SALARIES

Although issues of hospital and nursing journals for the years 1952 to 1962 were reviewed, little information was found regarding the effect which wage and salary programs had had upon nursing service salaries. Two of the articles in hospital magazines included a chart of the nursing service pay grades and salaries which had resulted from their wage and salary programs but did not indicate whether the salaries represented an increase over previous

³⁰Clarence W. Bushnell, "The Three Dimensions of Personnel Costs," Hospitals, J.A.H.A., 36:46, January 1, 1962.

³¹Paul Keiser, "This Planned Salary Program Gives All Employees a Fair Share," The Modern Hospital, 94:88, May, 1950; and "Hospital Reduces Rates After Increasing Wages," Hospitals, J.A.H.A., 32:111, October, 1958.

³²Lester M. Bornstein and J. A. Rosenkrantz, "This Wage and Salary Program is Easy to Apply," Hospitals, J.A.H.A., 35:32, April 1, 1961.

salaries.³³

Nursing apparently had not been greatly involved in a study of wage and salary administration. However, the American Nurses' Association had two programs that could have contributed to the wage and salary programs in hospitals.

In 1946, the American Nurses' Association had established an economic security program "to improve the employment conditions of nurses through group action."³⁴ Through the state nurses' associations, the American Nurses' Association had provided guidance to nurses who were attempting to bring about improvements in salaries and working conditions. In some instances, when the state nurses' association had served as a bargaining agent, contracts had been negotiated for nurses employed in hospitals.³⁵ As a part of the economic security program, many state associations had adopted minimum standards of employment.³⁶ These standards were available to anyone who desired to know the opinions

³³Paul Keiser, op. cit., p. 92; and Robert A. Bradburn, "Job Evaluation Answers the 65-Cent Question for Hospitals," Hospitals, J.A.H.A., 31:34, August 16, 1957.

³⁴Barbara G. Schutt, "The ANA Economic Security Program. . .What it is and why," The American Journal of Nursing, 58:520, April, 1958.

³⁵Gretchen Gerds and Adele Herwitz, "ANA for Us for Nursing for Patient Care," The American Journal of Nursing, 61:66, June, 1961.

³⁶Barbara G. Schutt, op. cit., p. 521.

expressed by nurses regarding their minimum wages and personnel standards.

Another program of the American Nurses' Association had produced material which was available to aid in wage and salary programs. In 1952, the American Nurses' Association had established committees to define the functions, standards, and qualifications for practice in the various nursing positions. Official statements of functions, standards and qualifications were adopted by the sections of the American Nurses' Association during the 1954-1956 biennium.³⁷ Those statements were available to persons who were doing job analyses of nursing positions. They would have aided in determining whether or not the functions being performed by nurses in a given hospital were actually the functions which a registered nurse in that position should perform.

Although professional nurses had studied their functions and had been interested in economic security, the literature indicated that they had just begun to be interested in job analysis as a means of determining salaries. There was one report in a 1961 nursing journal of the use

³⁷American Nurses' Association, Past, Present and Future of FS&Q (A Guide for the Interpretation and Implementation of the Statements of Functions, Standards, and Qualifications for Practice, New York: American Nurses' Association, 1957), p. 1.

of job analysis to identify differences in positions within a nursing service. The study had resulted in some salary changes.³⁸

At a December 1960 conference on economic security, Risley told the assembled nursing leaders that:

. . . a great deal of attention is being given to developing job evaluation programs, to using a job classification plan--that is, arranging a structure of jobs based on responsibility, skill requirements, job demands, etc. From the point of view of the nurse, the development of a job structure based on responsibilities and elements of job appraisal should, I think, lead to a more equitable return. Such a wage program pegs hospital wages more closely to those existing in outside occupations and is one way of establishing a more realistic basis for wages within hospitals.³⁹

IV. SUMMARY

The review of the literature had identified four methods used by industry in the analysis and evaluation of jobs. Those methods were (1) ranking, (2) classification, (3) factor-comparison, and (4) point method. Following evaluation, other factors such as comparative wage rates, labor supply, and union pressures were considered in

³⁸Donald D. Ainsworth, "Measuring Responsibilities in Nursing Positions," The American Journal of Nursing, 61:69, December, 1961.

³⁹Robert F. Risley, "Panel of Factors in Personnel Administration in Hospitals," American Nurses' Association Economic Security Conference December 5-9, 1960 (New York: American Nurses' Association, October, 1961), p. 52.

determining the wages for an individual job.

Methods similar to those used by industry have been used in some hospitals to establish wage and salary programs. The effect of such programs upon nursing service salaries had not been reported.

CHAPTER III

METHOD

The positions at the University of Colorado Medical Center were classified and assigned to pay grades following a job study done by the Public Administration Service in 1947-1948.¹ Since that time, several staff classification and pay plans had been issued for the Medical Center which listed the job classification, the pay grade of each position and the salary range for each pay grade. A copy of each classification and pay plan was placed in a "File on Medical Center Pay Scales Since 1948" which was kept in the Personnel Office at the Medical Center. A second job classification study was made at the Medical Center in 1957.²

The University of Colorado Board of Regents was the administrative body responsible for the total University program. All changes in classification and pay plans were

¹University of Colorado Position Classification Plan (A Report Prepared by the Public Administration Service of Chicago, 1948) (Duplicated.)

²"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu, 1957).

presented to the Regents for approval.³

Method selected. The historical method of research was selected for this project since the aim was to trace the progress of the wage and salary program through several years.

Procedure. An interview with the personnel officer of the Medical Center was conducted to ascertain what materials were available for study. Having been assured the full cooperation of the personnel officer and granted access to all records regarding position classification and wage and salary plans in the personnel department, a preliminary study was begun. The preliminary study was carried out to determine (1) the extent of available information and (2) those positions within the hospital which could, for the purposes of this study, be compared with nursing service positions.

After reviewing the material, it was decided to limit the study to a ten-year period from 1952 through 1961. Six nursing service positions were selected for study. These were (1) Hospital Attendant, (2) Practical Nurse, (3) Graduate Staff Nurse, (4) Head Nurse, (5) Clinical Supervisor, and (6) Director of Nursing Service. While several nursing service positions were eliminated from the study, these six

³Throughout the remainder of this thesis, "Regents" shall mean the University of Colorado Board of Regents.

positions revealed the salary range between the lowest and highest positions in nursing service over the years at the Medical Center.⁴ The study of beginning salaries for this group showed changes within nursing service salaries during the ten-year period which were compared with such changes for selected non-nursing positions.

Criteria for choice of positions for comparison with nursing service positions were:

1. The position was classified in the same pay grade at some time during the ten years.
2. The position was one that would usually be found in a hospital.
3. A comparable position might be found in a business or industry outside the hospital industry.

It was decided to compare each of the six nursing service positions with two non-nursing positions. The following positions met the above criteria and were used for comparison: (1) Clerk I and Janitor compared with Hospital Attendant; (2) Cook I and Secretary I compared with Practical Nurse; (3) X Ray Technician and Medical Technolo-

⁴Nursing Service positions listed in the "University of Colorado Medical Center Staff Classification and Pay Plan," July 1, 1961, which were not included in this study were: Assistant Head Nurse, Nurse Anesthetist II, Nurse Supervisor in Experimental Surgery, Radiotherapy Nurse, Evening and/or Night Supervisor, Assistant Director of Nursing, Associate Director of Nursing, Visitor Exchange Nurse, and Undergraduate Nurse.

gist I compared with Graduate Staff Nurse; (4) Electrician and Dietitian I compared with Head Nurse; (5) Medical Social Worker I and Accountant I compared with Clinical Supervisor; and (6) Personnel Officer and Director of Medical Social Service compared with Director of Nursing Service.⁵

Collection of data. The beginning salaries for the selected positions were obtained from the pay plans issued from 1952 through 1961 by the University of Colorado Medical Center.⁶ The Minutes of the Board of Regents were reviewed for any reference to the pay plans, including reasons for changing or not changing all or part of the plan.

Personnel policies were examined to determine whether nursing service policies and fringe benefits varied in any way from those of the other groups.

The "File on Medical Center Pay Scale Since 1948," was reviewed for other pertinent information.⁷ When

⁵Positions descriptions for seventeen of these eighteen positions at the University of Colorado Medical Center are included in Appendix A. The position description for the position Personnel Officer was not written.

⁶Pay plans were included in the "File on Medical Center Pay Scale Since 1948," in the Personnel Department, University of Colorado Medical Center, Denver.

⁷The "File on Medical Center Pay Scale Since 1948," included copies of letters and memoranda which pertained to the wage and salary program as well as copies of the pay plans issued.

references were found to legislative action, the original bill was examined.

The report of the 1957 Job Classification Study was reviewed.⁸ Beginning salaries which were determined by evaluation of jobs in the study in 1957 were compared with the beginning salaries granted in the 1956 and 1958 pay plans.

Analysis of data. The data were presented in four major divisions: (1) history of the University of Colorado Medical Center wage and salary program from 1952 to 1961; (2) comparison of nursing service salary changes to changes in salaries of the selected non-nursing positions; (3) the 1957 Job Classification Study evaluations of the positions; and (4) factors other than job evaluation which had affected beginning salaries at the Medical Center.

SUMMARY

Following a review of available material in the Medical Center Personnel Office, the historical method was chosen for this research project. The study included a review of (1) wage and salary plans of the Medical Center, (2) Minutes of the meetings of the University of Colorado

⁸"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu, 1957).

Board of Regents, (3) reports of job classification studies at the Medical Center, (4) miscellaneous letters and memoranda included in the "File on Medical Center Pay Scale Since 1948," and (5) legislative bills which influenced the Medical Center wage and salary program.⁹

⁹Legislative bills reviewed were House Bill Number 473, Forty-First General Assembly, State of Colorado; House Bill Number 450, Forty-Third General Assembly, State of Colorado; and "Civil Service and State Employees," Laws Passed at the First Regular Session of the Forty-Second General Assembly of the State of Colorado (Denver, Bradford-Robinson Printing Company, Published by Authority of George J. Baker, Secretary of State, 1959), Chapter 80, pp. 309-313.

CHAPTER IV

WAGE AND SALARY PROGRAM OF THE UNIVERSITY OF COLORADO MEDICAL CENTER

The study of the wage and salary program of the University of Colorado Medical Center began with an examination of the plan in 1952 and an attempt to identify factors which had determined the 1952 wage and salary structure. Major changes in the wage and salary program for the ten-year period from 1952 through 1961 were identified and the four years, 1952, 1955, 1958 and 1961 were chosen as the years that reflected major salary changes. The years 1952 and 1961 were chosen as the beginning and ending years of the study. The review of the records showed that the years 1955 and 1958 reflected important changes in the wage and salary program.

Beginning salaries in each of the four years for six nursing service positions were compared with beginning salaries for twelve non-nursing positions. Salary differences and differences in the percentage of salary increases were then identified. Each nursing service position was compared with two non-nursing positions which had, at some time during the ten years, received the same beginning salary as the nursing service position. Relationships

within the total group were studied by comparing, as percentages of the 1952 beginning salaries, the differences between the 1961 and the 1952 beginning salaries for each position. Reasons for the differences that were identified were sought within the report of job analysis and job evaluation study made in 1957.¹ When it was found that the job evaluation study did not adequately explain the changes which had occurred in the beginning salaries, additional factors which had affected the salary plan were sought and identified.

I. HISTORY OF THE MEDICAL CENTER WAGE AND SALARY PROGRAM

Status of program in 1952. A job analysis and job classification of all non-academic positions on both the Boulder and Medical Center campuses of the University of Colorado had been completed by the Public Administration Service in 1948.² Information for the analysis of jobs was obtained by the use of job questionnaires completed by individual employees and reviewed by supervisors and members

¹"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu, 1957).

²University of Colorado Position Classification Plan (A Report Prepared by the Public Administration Service of Chicago, 1948). (Duplicated.)

of the survey staff. Classification of jobs was based upon the similarities in the nature of the work, the level of difficulty and responsibility, and the required experience and training for beginning personnel.³

The classification system prepared by the Public Administration Service had been in use for three years when the 1952 wage and salary plan for the Medical Center was issued. The 1952 plan included classification changes which had been made during the three-year period.⁴

Major general changes, 1952 to 1961. The wage and salary plan issued for July 1, 1952 was based upon a forty-two hour week. In September of that year, the Regents approved a forty-hour work week for the professional service, Boulder and Denver campuses.⁵ A new wage and salary plan was issued for the Medical Center on October 1, 1952.⁶ This plan was based on a forty-hour week but the monthly

³Ibid., p. ii.

⁴ University of Colorado Medical Center Pay Plan, 1952 (Included in the "File on Medical Center Pay Scale Since 1948," in the Personnel Department, University of Colorado Medical Center, Denver.)

⁵ University of Colorado Board of Regents, Minutes of Meeting, September 19, 1952 (Included in file of "Regents' Minutes," Personnel Department, University of Colorado Medical Center, Denver), p. 1.

⁶ University of Colorado Medical Center Pay Plan effective October 1, 1952 (Included in the "File on Medical Center Pay Scale Since 1948," in the Personnel Department, University of Colorado Medical Center, Denver).

salaries remained the same as they had been for the forty-two hour week. This gave all employees a raise in base pay equal to two hours wages per week.

The pay plan issued for July 1, 1954, carried salaries identical to the salaries of 1952 for all positions studied except the Director of Nursing Service, the Personnel Officer, and the Director of Medical Social Service.⁷ Each of these positions had an increase in the beginning salary of one hundred dollars per year.

A new pay scale was established for the Medical Center in 1955. The new pay scale had fewer pay grades with a greater difference between grades and more positions assigned to each grade. Starting salaries for some positions were increased, some remained the same, and some decreased.⁸

During 1956-57, a Job Classification Study was carried out in order that the University might qualify for funds appropriated by House Bill 473.⁹ The Bill, passed by

⁷ University of Colorado Medical Center Pay Plan effective July 1, 1954 (Included in the "File on Medical Center Pay Scale Since 1948").

⁸ University of Colorado Medical Center Pay Plan effective July 1, 1955; and Statement of Policy on Transitions to New Pay Scale (Included in "File on Medical Center Pay Scale Since 1948").

⁹ House Bill Number 473, Forty-First General Assembly, State of Colorado.

the Forty-First General Assembly, had provided an appropriation to increase salaries and wages in state institutions but had required that a revised position classification and pay plan be prepared before the monies could be allotted to an individual institution.

The classification study at the Medical Center was carried out under the direction of Leota Pekrul, Personnel Director of the Medical Center, and Dr. Otis Lipstreu, Professor of Management at the University of Colorado. A point method of job evaluation was used.¹⁰

The Job Classification Study was completed in April 1957 for all employees at the Medical Center except the graduate nurse group and positions in the administrative service.¹¹ A more comprehensive study of nursing functions was done which delayed completion of the nursing positions classification until later in the year. A report of the findings of the evaluation study of nursing service and administrative positions was not written.

The salary and wage plan prepared for July 1, 1958 contained all the changes affected by the 1957 classifica-

¹⁰"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver," (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu), p. 19.

¹¹Ibid., p. 1.

tion for all personnel except the administrative service.¹²
The changes for the administrative service appeared in the 1959 pay plan.¹³

No major changes have occurred in the wage and salary program at the Medical Center since that time.

Personnel policies. The "Personnel Policies of the University of Colorado Medical Center" were studied to determine whether benefits were equal for all groups of employees. Although no major differences were identified, policies covering overtime pay, vacations, and premium pay for evening and night shifts did provide different considerations for individual employees and groups of employees.

Differences in overtime pay and vacations were based upon the designation of the position as professional or administrative.¹⁴ The normal work week of the Medical Center was forty hours per week. Overtime for personnel who were not designated as professional or administrative was compensated either by allowance of time off or by payment of wages both of which were compensated at a time and

¹² University of Colorado Medical Center Pay Plan effective July 1, 1958 (Included in the "File on Medical Center Pay Scale Since 1948").

¹³ University of Colorado Medical Center Pay Plan effective July 1, 1959 (Included in the "File on Medical Center Pay Scale Since 1948").

¹⁴ See definitions of professional and administrative employees on page 10.

one-half rate.¹⁵

Although professional and administrative personnel had provision for a forty-hour week, the work week was not prescribed in terms of clock hours and the overtime provisions did not apply. Overtime for professional and administrative personnel could be compensated by time off duty but not at the time and one-half rate.¹⁶

Differences in the amount of earned vacation began with the third year of employment. During the first two years of employment, all employees earned twelve working days paid vacation annually. Beginning with the third year of employment, professional and administrative personnel earned twenty-two working days paid vacation annually. There was no increase for the amount of vacation for other staff employees until the eleventh year of continuous service.¹⁷

A third fringe benefit was identified which was given to the portion of the nursing staff assigned to evening and night duty. Those employees received a differential in wages at the rate of one dollar per shift for registered nurses, seventy-five cents per shift for licensed practical

¹⁵"Staff Personnel Policies of the University of Colorado," (Revised 1959), Section 6.3. (Mimeographed.)

¹⁶Ibid., Section 6.4.

¹⁷Ibid., Section 8.5.

nurses and fifty cents per shift for hospital attendants.¹⁸

No other differences were identified which would affect the basic salary of the employees of the Medical Center.

II. RELATIONSHIP OF SALARIES: SELECTED NURSING AND NON-NURSING POSITIONS

Hospital Attendant. The Hospital Attendant salaries were compared with the salaries of the Clerk I and the Janitor.¹⁹

The Hospital Attendant performed elementary nursing work in the care and treatment of patients in the general or psychiatric hospital under close supervision by nurses or other professional or technical personnel. She received on-the-job training.²⁰

The Clerk I performed routine clerical or office procedures. She was not required to have touch-typing ability and worked under close supervision.²¹

The Janitor performed manual work in cleaning and

¹⁸"University of Colorado Medical Center Personnel Policies, Nursing Service," (Mimeographed.)

¹⁹Complete position descriptions for all positions studied are in Appendix A.

²⁰University of Colorado Medical Center Position Classification Plan, 1957, Class Number 520.

²¹Ibid., Class Number 122.

house-keeping maintenance.²²

Table I shows the beginning salaries for these Medical Center positions in 1952, 1955, 1958 and 1961 with the total amount of increase in the salary for each position from 1952 to 1961 and the percentage of the 1952 salary represented in the total increase.

From 1952 to 1961, the beginning salaries for these positions at the Medical Center increased as follows:

(1) Hospital Attendant from \$166 to \$230 per month, an increase of sixty-four dollars; (2) Clerk I from \$172 to \$240 per month, an increase of sixty-eight dollars; and (3) Janitor from \$172 to \$250 per month, an increase of seventy-eight dollars. The percentages of the 1952 beginning salaries represented in the total salary increases were (1) Hospital Attendant, thirty-eight and six tenths per cent; (2) Clerk I, thirty-nine and five tenths per cent; and (3) Janitor, forty-five and three tenths per cent.

Practical Nurse. The Practical Nurse salaries were compared with the salaries of the Secretary I and the Cook I.

The Practical Nurse performed limited duties in the care of the physically and mentally ill patients. She worked under the direction of the professional nurse and was

²²Ibid., Class Number 204.

TABLE I

BEGINNING MONTHLY SALARIES¹ FOR THE POSITIONS OF HOSPITAL ATTENDANT, CLERK I, AND JANITOR AT THE UNIVERSITY OF COLORADO MEDICAL CENTER IN 1952, 1955, 1958 AND 1961 WITH THE TOTAL INCREASE 1952 TO 1961 AND THE PERCENTAGE OF THE 1952 SALARY WHICH THE TOTAL INCREASE COMPRISED

POSITION	Beginning Salary Year			Total Increase 1952-1961	Increase as Percentage of 1952 Salary
	1952	1955	1958	1961	
Hospital Attendant	\$166	\$165	\$209	\$230	\$64 38.6
Clerk I	172	177	209	240	68 39.5
Janitor	172	177	209	250	78 45.3

¹Source: University of Colorado Medical Center Pay Plan included in the "File on Medical Center Pay Scale Since 1948," Personnel Office, University of Colorado Medical Center, Denver, Colorado.

required to have a license to practice by the Colorado Board of Licensed Practical Nurse Examiners.²³

The Secretary I performed general clerical work with shorthand as an essential duty.²⁴

The Cook I worked in general cooking and did volume cooking for either a small group or a large group. "Work is under close supervision or is sufficiently simple that limited cooking experience is required."²⁵

Table II shows the beginning monthly salaries for these positions at the Medical Center in 1952, 1955, 1958 and 1961 with the total amount of increase in the salary for each position from 1952 to 1961 and the percentage of the 1952 salary represented by the total increase.

From 1952 to 1961, the beginning salaries for these positions at the Medical Center increased as follows:

(1) Practical Nurse, from \$179 to \$240 per month, an increase of sixty-one dollars per month; (2) Cook I, from \$186 to \$250, an increase of sixty-four dollars; and (3) Secretary I, from \$179 to \$280, an increase of one hundred one dollars. The percentages of the 1952 salaries represented in the total salary increases were (1) Practical

²³Ibid., Class Number 521.

²⁴Ibid., Class Number 130.

²⁵Ibid., Class Number 226.

TABLE II

BEGINNING MONTHLY SALARIES¹ FOR THE POSITIONS OF PRACTICAL NURSE, COOK I AND SECRETARY I AT THE UNIVERSITY OF COLORADO MEDICAL CENTER IN 1952, 1955, 1958 AND 1961 WITH THE TOTAL INCREASE 1952 TO 1961 AND THE PERCENTAGE OF THE 1952 SALARY WHICH THE TOTAL INCREASE COMPRISED

POSITION	Beginning Salary Year			Total Increase 1952-1961	Increase as Percentage of 1952 Salary
	1952	1955	1958	1961	
Practical Nurse	\$179	\$177	\$222	\$240	\$61 34.1
Cook I	186	189	222	250	64 34.4
Secretary I	179	202	251	280	101 56.4

¹Source: University of Colorado Medical Center Pay Plan included in the "File on Medical Center Pay Scale Since 1948," Personnel Office, University of Colorado Medical Center, Denver, Colorado.

Nurse, thirty-four and one tenth per cent; (2) Cook I, thirty-four and four tenths per cent; and (3) Secretary I, fifty-six and four tenths per cent.

Graduate Staff Nurse. The Graduate Staff Nurse salaries were compared with the salaries of the X-Ray Technician and the Medical Technologist I. These positions were classified as professional.

The Graduate Staff Nurse was a professional nurse who was a graduate of an accredited school of nursing and licensed to practice in Colorado. She performed general nursing activities and might be assigned charge responsibilities for a ward or hospital area on any shift. She served as a team leader and directed the activities of other professional and non-professional personnel.²⁶

The X-Ray Technician was a high school graduate who had completed an approved two-year course in x-ray techniques and was registered by the American Registry of X-Ray Technicians. The work involved taking and developing x-ray films as ordered by physicians. The technician worked under direct supervision of a physician but was expected to exercise initiative and judgment in modifying techniques to individual patient situations.²⁷

²⁶Ibid., Class Number 522.

²⁷Ibid., Class Number 569.

The Medical Technologist I was a graduate of a college or university and had completed an approved hospital affiliation in Medical Technology required for registration as a technologist with the American Society of Clinical Pathologists. The duties included performance of standard serological, bacteriological, hematological, and biochemical laboratory tests. The technologist worked under general supervision and was not responsible for supervision of others.²⁸

Table III shows the beginning monthly salaries for these Medical Center positions in 1952, 1955, 1958 and 1961 with the total amount of increase in the salary for each position from 1952 to 1961 and the percentage of the 1952 salary represented by the total increase.

From 1952 to 1961, the beginning salaries for these positions at the Medical Center increased as follows:

(1) Graduate Staff Nurse, from \$225 to \$325, an increase of one hundred dollars; (2) X-Ray Technician, from \$225 to \$295 per month, an increase of seventy dollars; and (3) Medical Technologist I, from \$225 to \$355 per month, an increase of one hundred thirty dollars. The percentage of the 1952 salaries represented in the total increases were: (1) Graduate Staff Nurse, forty-four and four tenths per

²⁸Ibid., Class Number 573.

TABLE III

BEGINNING MONTHLY SALARIES¹ FOR THE POSITIONS OF GRADUATE STAFF NURSE, X-RAY TECHNICIAN AND MEDICAL TECHNOLOGIST I AT THE UNIVERSITY OF COLORADO MEDICAL CENTER IN 1952, 1955, 1958 AND 1961 WITH THE TOTAL INCREASE 1952 TO 1961 AND THE PERCENTAGE OF THE 1952 SALARY WHICH THE TOTAL INCREASE COMPRISED

POSITION	Beginning Salary			Total Increase 1952-1961	Increase as Percentage of 1952 Salary
	1952	1955	1958 1961		
Graduate Staff Nurse	\$225	\$247	\$284 \$325	\$100	44.4
X-Ray Technician	225	231	284 295	70	31.1
Medical Technologist I	225	247	302 355	130	57.8

¹Source: University of Colorado Medical Center Pay Plan included in the "File on Medical Center Pay Scale Since 1948," Personnel Office, University of Colorado Medical Center, Denver, Colorado.

cent; (2) X-Ray Technician, thirty-one and one tenth per cent; and (3) Medical Technologist I, fifty-seven and eight tenths per cent.

Head Nurse. The Head Nurse salaries were compared with the salaries of the Dietitian I and the Electrician. The Head Nurse and Dietitian I were designated as professional while the Electrician was not designated as professional.

The Head Nurse was a registered professional nurse who was responsible for the immediate supervision of a hospital ward or similar unit. It was recommended that the Head Nurse have a bachelor's degree and have two years of experience in hospital nursing. She was responsible for direction and supervision of the work of a number of professional and non-professional nursing personnel.²⁹

The Dietitian I was recommended to be a college graduate who had served a dietary internship and was a member of the American Dietetic Association. Employees in this class were responsible for the immediate supervision of a number of employees who prepared and served food.³⁰

The Electrician was a graduate of a high school or vocational school who had had four years of experience as

²⁹Ibid., Class Number 524.

³⁰Ibid., Class Number 234.

a skilled electrician or had completed a recognized apprenticeship. He performed skilled electrical work in the installation, alteration, maintenance, and repair of electrical systems and equipment. He usually worked independently but might be asked to supervise apprentices and helpers.³¹

Table IV shows the beginning monthly salaries for these Medical Center positions in 1952, 1955, 1958 and 1961 with the total amount of increase in the salary for each position from 1952 to 1961 and the percentage of the 1952 salary represented by the total increase.

From 1952 to 1961, the beginning monthly salaries for these Medical Center positions increased as follows: (1) Head Nurse, from \$274 to \$375, an increase of one hundred one dollars; (2) Dietitian I, from \$243 to \$355, an increase of one hundred twelve dollars; and (3) Electrician, from \$274 to \$540, an increase of two hundred sixty-six dollars. The percentages of the 1952 salaries represented in the total increases were: (1) Head Nurse, thirty-six and nine tenths per cent; (2) Dietitian I, forty-six and one tenth per cent; and (3) Electrician, ninety-seven and one tenth per cent.

Clinical Supervisor. The Clinical Supervisor

³¹Ibid., Class Number 303.

TABLE IV

BEGINNING MONTHLY SALARIES¹ FOR THE POSITIONS OF HEAD NURSE, DIETITIAN I AND ELECTRICIAN AT THE UNIVERSITY OF COLORADO MEDICAL CENTER IN 1952, 1955, 1958 AND 1961 WITH THE TOTAL INCREASE 1952 TO 1961 AND THE PERCENTAGE OF THE 1952 SALARY WHICH THE TOTAL INCREASE COMPRISED

POSITION	Beginning Salary				Total Increase 1952-1961	Increase as Percentage of 1952 Salary
	1952	1955	1958	1961		
Head Nurse	\$274	\$302	\$343	\$375	\$101	36.9
Dietitian I	243	264	302	355	112	46.1
Electrician	274	364	425	540	266	97.1

¹Source: University of Colorado Medical Center Pay Plan included in the "File on Medical Center Pay Scale Since 1948," Personnel Office, University of Colorado Medical Center, Denver, Colorado.

salaries were compared with the salaries of the Medical Social Worker I and the Accountant I. These three positions were designated as professional.

The Clinical Supervisor position was defined as "supervisory and administrative professional nursing involving immediate supervision of two or more clinical units."³² The Supervisor's work involved responsibilities for standards of nursing care, staffing to meet the patient load, and provision for adequate supplies and equipment. In addition to being a registered professional nurse, it was recommended that the Clinical Supervisor have a bachelor's degree supplemented by graduate courses in nursing education and administration and have four years of experience in nursing.³³

The Medical Social Worker I performed professional medical social work with hospital and clinic patients. The primary responsibility was for assisting individual patients with social and emotional problems. Work was performed under direction of a supervising case worker. The Medical Social Worker was recommended to have completed a master's degree from a school of social work accredited by the Council on Social Work Education.³⁴

³²Ibid., Class Number 526.

³³Ibid.

³⁴Ibid., Class Number 544.

The Accountant I was recommended to be a graduate from a four-year college or university with a major in accounting and business administration. His work involved

. . . varied assignments in the operation of a central accounting system including the assembly and analysis of data, the preparation of statements and reports, and the rendering of technical assistance to students and employees.³⁵

He worked under the general supervision of the Chief Accountant and Accountant II's.

Table V shows the beginning monthly salaries for these Medical Center positions in 1952, 1955, 1958 and 1961 with the total amount of the 1952 to 1961 salary increase and the percentage of the 1952 salary represented by the total increase.

From 1952 to 1961, the beginning salaries for these positions at the Medical Center were given the following increases: (1) Clinical Supervisor, from \$335 to \$415, an increase of eighty dollars; (2) Medical Social Worker I, from \$263 to \$415, an increase of one hundred fifty-two dollars; and (3) Accountant I, from \$253 to \$415, an increase of one hundred sixty-two dollars. The percentages of the 1952 salaries represented in the total increases were: (1) Clinical Supervisor, twenty-three and nine tenths per cent; (2) Medical Social Worker I, fifty-seven and

³⁵Ibid., Class Number 166.

TABLE V

BEGINNING MONTHLY SALARIES¹ FOR THE POSITIONS OF CLINICAL SUPERVISOR, MEDICAL SOCIAL WORKER I AND ACCOUNTANT I AT THE UNIVERSITY OF COLORADO MEDICAL CENTER IN 1952, 1955, 1958 AND 1961 WITH THE TOTAL INCREASE 1952 TO 1961 AND THE PERCENTAGE OF THE 1952 SALARY WHICH THE TOTAL INCREASE COMPRISED

POSITION	Beginning Salary			Total Increase 1952-1961	Increase as Percentage of 1952 Salary
	1952	1955	1958	1961	
Clinical Supervisor	\$335	\$345	\$390	\$415	\$80 23.9
Medical Social Worker I	263	302	322	415	152 57.8
Accountant I	253	282	322	415	162 64.0

¹Source: University of Colorado Medical Center Pay Plan included in the "File on Medical Center Pay Scale Since 1948," Personnel Office, University of Colorado Medical Center, Denver, Colorado

eight tenths per cent; and (3) Accountant I, sixty-four per cent.

Director of Nursing Service. The Director of Nursing Service beginning salaries were compared with the salaries of the Personnel Officer and the Director of Medical Social Service. These were professional and administrative positions.

The Director of Nursing Service was a registered professional nurse responsible for direction of all nursing services in the University Hospitals, general and psychiatric, and in the clinics. She was recommended to have both a bachelor's and a master's degree with specialization in nursing administration and to have had nine years of experience in nursing.³⁶

The Director of Medical Social Service was responsible for direction of medical social work services in the general hospital and clinics. She was recommended to hold a master's degree in medical social work and to have had eight years of experience.³⁷

The 1957 University of Colorado Medical Center Position Classification Plan did not contain a written position description for the Personnel Officer. In 1959, the position of Personnel Officer was placed in a group of unclassi-

³⁶Ibid., Class Number 540.

³⁷Ibid., Class Number 554.

fied administrative personnel. No salary ranges are published in the pay plan for the unclassified administrative personnel of the Medical Center.³⁸

Table VI shows the beginning monthly salaries for the Director of Nursing Service and the Director of Medical Social Service in 1952, 1955, 1959 and 1961 with the total amount of the 1952 to 1961 salary increase and the percentages of the 1952 salaries represented in the total increase. The salary for the Personnel Officer in 1952 and 1955 is also shown.

From 1952 to 1961, the beginning salary for the Director of Nursing Service increased from \$466 to \$585 per month, a total increase of one hundred nineteen dollars. The Director of Medical Social Service's beginning salary increased from \$400 to \$585 per month, an increase of one hundred eighty-five dollars. The percentages of the 1952 salaries represented in the total increases were: (1) Director of Nursing Service, twenty-five and five tenths per cent; and (2) Director of Medical Social Service, forty-six and three tenths per cent.

Comparison of total group. The actual cash beginning salaries indicated that all personnel had received

³⁸"University of Colorado Board of Regents, Minutes of Meeting, June 26, 1959" (Included in file of "Regents' Minutes," Personnel Department, University of Colorado Medical Center, Denver), p. 4.

TABLE VI

BEGINNING MONTHLY SALARIES¹ FOR THE POSITIONS OF DIRECTOR OF NURSING SERVICE,
DIRECTOR OF MEDICAL SOCIAL SERVICE AND PERSONNEL OFFICER² AT THE
UNIVERSITY OF COLORADO MEDICAL CENTER IN 1952, 1955, 1959
AND 1961 WITH THE TOTAL INCREASE 1952 TO 1961 AND
THE PERCENTAGE OF THE 1952 SALARY WHICH THE
TOTAL INCREASE COMPRISED

POSITION	Beginning Salary			Total Increase 1952-1961	Increase as Percentage of 1952 Salary
	1952	1955	1959	1961	
Director of Nursing Service	\$466	\$491	\$541	\$585	\$119 25.5
Director of Medical Social Service	400	425	541	585	185 46.3
Personnel Officer	466	491	---	---	---

¹Source: University of Colorado Medical Center Pay Plan included in the
"File on Medical Center Pay Scale Since 1948," Personnel Office,
University of Colorado Medical Center, Denver, Colorado.

² The position of Personnel Officer was placed in Unclassified Administrative
Service in 1959. Salaries for unclassified positions were not included
in the Medical Center Pay Plan .

increases in wages at various times during the ten year period. To determine the changes increased salaries had made in the relationships of the selected positions to each other, the positions were ranked according to the beginning salaries for 1952. A second ranking was done for 1961. For the eighteen positions, where were twelve different salaries present both years. The salaries were arranged in order from highest to lowest and assigned ranks from one, the highest, to twelve, the lowest. It was assumed that the unclassified administrative positions would have received a higher salary than the classified positions. Therefore, the unclassified position of Personnel Officer was placed in rank one in the 1961 rank order. The changes in the positions included in each rank were then noted. Table VII shows the rank order of positions for 1952 and 1961.

The top rank which had been shared by the Director of Nursing Service and the Personnel Officer in 1952 was occupied only by the unclassified position of the Personnel Officer in 1961. The Director of Nursing Service had moved from the top rank and shared the second rank position with the Director of Medical Social Service. Other changes in rank were: (1) Clinical Supervisor, down one rank, from three to four; (2) Head Nurse, up one rank, from six to five; (3) Electrician, up three ranks, from six to three;

TABLE VII

RANK ORDER OF BEGINNING SALARIES FOR SELECTED POSITIONS
UNIVERSITY OF COLORADO MEDICAL CENTER
1952 AND 1961

1952			1961		
Rank	Position	Salary	Rank	Position	Salary
1	Personnel Officer Director of Nursing Service	\$466	1	Personnel Officer	\$--- ^a
2	Director of Medical Social Work	400	2	Director of Nursing Service Director of Medical Social Work	585
3	Clinical Supervisor	335	3	Electrician	540
4	Medical Social Worker I	263	4	Medical Social Worker I Accountant I Clinical Supervisor	415
5	Accountant I	253	5	Head Nurse	375
6	Head Nurse Electrician	274	6	Medical Technologist I Dietitian I	355
7	Dietitian I	243	7	Graduate Staff Nurse	325
8	Graduate Staff Nurse X-Ray Technician Medical Technologist I	225	8	X-Ray Technician	295
9	Cook I	187	9	Secretary I	280
10	Practical Nurse Secretary	179	10	Janitor Cook I	250
11	Janitor Clerk I	172	11	Practical Nurse Clerk I	240
12	Hospital Attendant	166	12	Hospital Attendant	230

Source: University of Colorado Medical Center Pay Plan 1952 and 1961.

^a Unclassified Administrative position had no published salary range.

(4) Accountant I, up one rank, from five to four; (5) Dietitian I, up one rank, from seven to six; (6) Graduate Staff Nurse, up one rank, from eight to seven; (7) Medical Technologist I, up two ranks, from eight to six; (8) Cook I, down one rank, from nine to ten; (9) Practical Nurse, down one rank, from ten to eleven; (10) Secretary I, up one rank, from ten to nine; and (11) Janitor, up one rank, from eleven to ten.

The relationships had changed in the rank order. The Head Nurse, Accountant I, Electrician, Dietitian I, Graduate Staff Nurse, Medical Technologist, Secretary I and Janitor had all moved up one or more ranks. The Director of Nursing Service, Clinical Supervisor, Cook I and Practical Nurse had moved down one rank. The Personnel Officer, Director of Medical Social Service, Medical Social Worker I, X-Ray Technician, Clerk I and Hospital Attendant had remained in the same rank position in 1952 and 1961.

The positions were then arranged in rank order according to the percentage of the 1952 salaries granted as salary increases from 1952 to 1961. The Personnel Officer was not included in this group since there was no published beginning salary in 1961. The remaining seventeen positions received the following percentage increases: (1) Electrician, ninety-seven and one tenth per cent; (2) Ac-

countant I, sixty-four per cent; (3) Medical Social Worker I and Medical Technologist I, fifty-seven and eight tenths per cent; (4) Secretary I, fifty-six and four tenths per cent; (5) Director of Medical Social Service, forty-six and three tenths per cent; (6) Dietitian I, forty-six and one tenth per cent; (7) Janitor, forty-five and three tenths per cent; (8) Graduate Staff Nurse, forty-four and four tenths per cent; (9) Clerk I, thirty-nine and five tenths per cent; (10) Hospital Attendant, thirty-eight and six tenths per cent; (11) Head Nurse, thirty-six and nine tenths per cent; (12) Cook I, thirty-four and four tenths per cent; (13) Practical Nurse, thirty-four and one tenth per cent; (14) X-Ray Technician, thirty-one and one tenth per cent; (15) Director of Nursing Service, twenty-five and five tenths per cent; and (16) Clinical Supervisor, twenty-three and nine tenths per cent.

The eighteen positions studied had shown an increase in beginning salaries. The total amount of the increase for individual positions as well as the percentage of the 1952 salaries granted in wage increases showed wide variations. The amount of salary increase from 1952 to 1961 had ranged from sixty-one dollars for the Practical Nurse to two hundred sixty-six dollars for the Electrician. The percentage of the 1952 salary granted as salary increases during the same period had ranged from twenty-three and

nine tenths per cent for the Clinical Supervisor to ninety-seven and one tenth per cent for the Electrician.

One possible explanation for the variations which were found was that positions had been improperly evaluated in 1952. If this was the case, it was expected that a study of the evaluations done as a part of the Job Classification Study in 1957 would indicate errors in previous evaluations.³⁹

III. EFFECTS OF 1957 JOB EVALUATION ON SELECTED MEDICAL CENTER BEGINNING SALARIES

The 1957 Job Classification Study used the weighted-in-points method of job evaluation.⁴⁰ The eleven factors used in the evaluation were: (1) previous related experience required, (2) education required, (3) scope of duties, (4) initiative required, (5) responsibility for supervising, (6) responsibility for safety of others, (7) contacts required, (8) mental effort required, (9) responsibility for error, (10) physical effort required, and (11) working

³⁹"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu, 1957).

⁴⁰See definition of weighted-in-points method of job evaluation on page 8.

conditions.⁴¹

Appendix B contains (1) the table of the factors with the number of points assigned to each degree; (2) the definition of each degree of each factor; (3) the point conversion table used to convert the number of points awarded an individual position into a pay grade for the position; and (4) the salary scale used during the 1957 study.

The report of the 1957 position classification study at the Medical Center included a list of the number of points assigned to the various positions.⁴² However, the nursing service positions and the administrative positions had not been evaluated at the time the report was written. A functional analysis of nursing service was then in progress and the evaluation of the nursing service positions was to follow the completion of the functional analysis. The report recommended that a different approach be used for administrative positions.⁴³

No written reports of the evaluation of nursing service and administrative positions were made. The only record of the evaluation points awarded to nursing service

⁴¹"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu, 1957), p. 33.

⁴²Ibid., pp. 8-16.

⁴³Ibid., p. 1.

positions was in a file of three by five cards in the office of the Personnel Officer. A card had been prepared for each Medical Center position with the position title and the total number of evaluation points awarded the position written on the card. Some administrative positions other than those in nursing service and social service were not included in the card file.

With the use of the two sources, the report of the 1957 study and the cards, evaluation points for seventeen of the eighteen positions included in this project were identified. There was no report of the evaluation points for the position of Personnel Officer.

After identifying the evaluation points for the seventeen positions, the Point Conversion Table was used to determine the pay grade to which each position would have been assigned if wages were paid on the basis of the evaluation.⁴⁴ The Point Conversion Table ended with pay grade seventeen which included positions that had received 325 to 338 points when evaluated. Four positions in the group studied received evaluation points above 339. Therefore, the Point Conversion Table was expanded to make an estimate of evaluation pay grades for the four positions possible. Since each of the seventeen pay grades in the

⁴⁴Ibid., p. 17; A copy of the Point Conversion Table is included in Appendix B, p. 136.

original table had been assigned to include a fifteen-point range, it was assumed that this series would have been continued. The expanded table contained eight additional pay grades as follows:

Pay Grade	Points	Pay Grade	Points
18	340-354	22	400-414
19	355-369	23	415-429
20	370-384	24	430-444
21	385-399	25	445-459

No estimate was made of the salary which would have been assigned to these eight pay grades.

Table VIII shows the following information about seventeen of the positions studied: (1) beginning salaries for 1956; (2) evaluation points awarded during evaluation study; (3) pay grades and beginning salaries computed from evaluation points; (4) pay grades given and beginning salaries paid fifteen positions in 1958; and (5) pay grades given and beginning salaries paid the Director of Nursing Service and the Director of Medical Social Service in 1959.⁴⁵

In 1958, only four of the seventeen positions were assigned to the pay grade determined by evaluation points.

⁴⁵ University of Colorado Medical Center Pay Plan (Included in "File on Medical Center Pay Scales Since 1948," Personnel Office, University of Colorado Medical Center, Denver).

TABLE VIII

BEGINNING SALARIES IN 1956, RESULTS OF 1957 EVALUATION IN POINTS ASSIGNED, PAY GRADE AND BEGINNING SALARY COMPUTED BY CONVERSION OF 1957 EVALUATION POINTS, AND THE PAY GRADE AND BEGINNING SALARY PAID IN 1958 FOR SEVENTEEN POSITIONS AT THE UNIVERSITY OF COLORADO MEDICAL CENTER

POSITION	1956 Begin- ning Salary ¹	1957 Evalu- ation Points ²	Pay Grade and Beginning Salary Computed from 1957 Evaluation Points		1958 Pay Grade ¹	1958 Begin- ning Salary ¹
			Pay Grade	Begin- ning Salary		
Janitor	\$197	133	4	\$209	4	\$209
Clerk I	197	145	5	222	4	209
Hospital Attendant	185	150	5	222	4	209
Cook I	209	156	5	222	5	222
Secretary I	222	169	6	236	7	251
Medical Technologist I	285	176	7	251	10	302
Practical Nurse	197	178	7	251	5	222
Accountant I	302	186	7	251	11	322
X-Ray Technician	251	206	9	284	9	284
Dietitian	284	224	10	302	10	302
Medical Social Worker I	322	234	10	302	11	322
Electrician	404	245	11	322	9 ^a	424
Graduate Staff Nurse	285	248	12	343	9	284
Head Nurse	330	347	18	---	12	343
Clinical Supervisor	366	385	21	---	14	390
Director of Medical Social Service	425	436	24	---	55 ^a	541 ^b
Director of Nursing Service	491	455	25	---	55 ^a	541 ^b

¹Source: Pay Plans in "File on Medical Center Pay Scale Since 1948," Personnel Office, University of Colorado Medical Center, Denver, Colorado.

²Source: "Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver," (An Unpublished Report of a Study Directed by Lecta Pekrul and Otis Lipstreu, 1957), pp. 8-16; and Card File of Evaluation Points kept in the Personnel Office, University of Colorado Medical Center, Denver.

³Pay Grade and Beginning Salary were determined by use of the Point Conversion Table included in the Report of the Pekrul and Lipstreu Study, p. 17.

^aSpecial pay grades were set up for skilled trades and administrative positions.

^bThese figures were taken from 1959 pay plan.

These were the Janitor, Cook I, X-Ray Technician and Dietitian I. The Clerk I and Hospital Attendant were evaluated at \$222 but were paid \$209. The Secretary I was evaluated at \$236 but was paid \$251. The Medical Technologist I and Accountant I were evaluated at \$251 but were paid \$302 and \$322. The Practical Nurse was also evaluated at \$251 but was paid \$222. The Medical Social Worker I was evaluated at \$302 but received \$322. The Electrician was evaluated at \$322 but received \$424. The Graduate Staff Nurse, evaluated at \$343, received \$284. The Head Nurse and Clinical Supervisor received evaluation points which placed them above the seventeenth pay grade but they were placed in the twelfth and fourteenth pay grade in 1958. Comparison of the salaries for the Director of Nursing Service and Director of Medical Social Service was not possible because the positions were not included in the 1958 pay plan and were placed in special administrative pay grades in 1959.⁴⁶

A comparison of the 1956 salaries, the evaluation salaries and beginning salaries in 1958 indicated further differences within the group. The four positions, Janitor, Cook I, X-Ray Technician and Dietitian I received the salary increase that had been indicated by the evaluation

⁴⁶Ibid., 1958 and 1959 pay plans.

points. Four of the positions studied were already being paid a salary above the salary indicated by evaluation. On the basis of the evaluation, the 1956 beginning salary for the Medical Social Worker I was twenty dollars a month above the value of the job. No salary increase was given for this position in 1958. However, the Accountant I salary which was fifty-one dollars above evaluated worth in 1956 was increased twenty dollars a month in 1958. The Electrician's 1956 salary which was eighty-two dollars per month higher than the evaluated worth of the job was also increased twenty dollars per month in 1958. The Medical Technician I salary was thirty-four dollars above evaluated worth in 1956 but was increased seventeen dollars in 1958. The Secretary I received an increase greater than was indicated by evaluation. The Secretary I, by evaluation, should have received an increase in the 1956 salary of fourteen dollars but was granted an increase of twenty-nine dollars.

Three positions received increases which were less than the increase indicated by evaluation points. The Clerk I, evaluated twenty-five dollars above the 1956 salary, received a twelve dollar increase in 1958. The Hospital Attendant evaluation salary was thirty-seven dollars above the 1956 salary but the beginning salary for 1958 was increased only twenty-four dollars. The Practical Nurse posi-

tion was evaluated fifty-four dollars higher than the salary in 1956 but was increased twenty-five dollars in 1958.

Evaluation of the Graduate Staff Nurse position placed the beginning salary fifty-eight dollars above the 1956 salary. In spite of this, the 1958 beginning salary was one dollar per month less than the 1956 salary.

Comparison of the 1956, 1958, and the evaluated salaries was not possible for the remaining four positions since there were no salaries determined for the positions evaluated above pay grade seventeen. It was noted that the salary increases between 1956 and 1958 for the nursing positions in this group of four were considerably less than the increase for the non-nursing position. The amount of the increases, 1956 to 1958, for this group were: Head Nurse, thirteen dollars; Clinical Supervisor, twenty-four dollars; Director of Nursing Service, fifty dollars; and Director of Medical Social Service, one hundred sixteen dollars.

These data indicated that factors other than the objective evaluation of the worth of a position, as determined by job analysis and job evaluation, influenced the wages and salaries paid at the Medical Center.

IV. OTHER FACTORS AFFECTING SALARIES AT THE UNIVERSITY OF COLORADO MEDICAL CENTER

Three factors were identified which had had a direct

influence on salary determination at the Medical Center.

Comparable rates paid in the community. The salaries which were recommended following the 1957 staff classification were not based totally upon evaluation of positions. Following the evaluation, wage survey data were used and evaluated rates were adjusted "to become more nearly competitive with the community rates."⁴⁷

A review of the Regents' Minutes showed the following instances in which the rates paid for comparable work in the community seemed to have been a major factor in determining the rates paid by the University of Colorado Medical Center.

At the February 25, 1955 Regents' meeting, an increase in salary for registered nurses was approved when it was reported that the Denver Hospital Council had agreed to raise the beginning salary of graduate staff nurses. The motion approved the raise and stated that it was to become effective on the date that the raise became effective in other Denver hospitals.⁴⁸

On May 20, 1955, a starting salary for graduate nurses that was higher than the starting salary in other

⁴⁷"Recommended Staff Classification and Compensation Program for the University of Colorado Medical Center, Denver" (An Unpublished Report of a Study Directed by Leota Pekrul and Otis Lipstreu, 1957), pp. 21-25.

⁴⁸"University of Colorado Board of Regents, Minutes of Meeting, February 25, 1955," p. 7.

Denver hospitals was requested by the Medical Center.⁴⁹
 The motion was not passed at that meeting, but on June 10, 1955, the salary increase was approved when Denver Hospital Council approval of the new rate was reported.⁵⁰

In 1957, the Regents approved a request to move the Medical Technologist I and two other technologist classes up one pay grade, "this to parallel an upward trend in the Denver community for employees in this category. . . ." ⁵¹

On July 1, 1959, a letter to the Board of Regents from the Medical Center Personnel Officer requested approval of changes in pay grade for some personnel and stated:

Wage and salary data available to the Personnel department indicate that certain job classes should be changed in pay grade in order to keep the Medical Center competitive with its community.⁵²

At the May 20, 1960 meeting, the Regents approved a re-classification of positions because it was reported that Denver pay scales had changed since the approval of the budget request for the Medical Center the previous October.⁵³

⁴⁹Ibid., May 20, 1955, p. 5.

⁵⁰Ibid., June 10, 1955, p. 2.

⁵¹Ibid., November 23, 1957, p. 7.

⁵²From a letter to the Board of Regents which is included in the "File on Medical Center Pay Scales Since 1948."

⁵³"University of Colorado Board of Regents, Minutes of Meeting, May 20, 1960," p. 12.

Available funds. The funds available in the current budget were also identified as a factor in determining salary rates at the Medical Center. The change to the forty-hour week was approved after a study had shown that the change could be accomplished without an increase in the 1952-53 budget.⁵⁴

In February 1955, the Regents approved a recommendation to increase salaries of carpenters, painters and engineers at the Medical Center "to take care of an inequity in their rates that had arisen because of recent tight budget situations."⁵⁵

Supply of personnel. One example of the effects of a personnel shortage upon salaries was found in the Regents' Minutes. Reference was made to difficulty in maintaining a sufficient number of general duty nurses in the May 20, 1955 Minutes.⁵⁶ On June 10, 1955, a twelve dollar per month increase in the starting salary for Graduate Staff Nurses was approved.⁵⁷ In spite of the increase in salary, a critical nursing situation at the Medical Center was reported to the Regents on August 11, 1955.⁵⁸ At that

⁵⁴Ibid., September 19, 1952, p. 1.

⁵⁵Ibid., February 26, 1955, p. 2.

⁵⁶Ibid., May 20, 1955, pp. 4,5.

⁵⁷Ibid., June 10, 1955, p. 2.

⁵⁸Ibid., August 11, 1955, p. 5.

meeting, it was reported:

As of the day of the meeting, there were about 33 vacancies in the 92 budgeted positions in the nursing service. The ads in the nursing journals had produced few inquiries and no applications. About 40 beds out of the 271 beds in the hospital are closed because of the nursing shortage.⁵⁹

The nursing situation was discussed again in the minutes of the September 24, 1955 meeting of the Regents.⁶⁰ On October 5, 1955, the Regents approved an increase in the starting salary for Graduate Staff Nurses of thirty-three dollars per month.⁶¹ At the November 18, 1955, meeting it was reported that following the increase in salaries, the hospital was "at nearly full strength in nursing personnel."⁶²

Cost of living. Only one reference to a salary increase for Medical Center personnel which was based on the cost of living was noted in the Regents' Minutes. On November 23, 1957, the Regents approved a motion to "grant a 3 per cent adjustment paralleling the increase in the cost of living (July 1956 to July 1957) for administrative classes, effective July 1, 1957."⁶³

⁵⁹Ibid.

⁶⁰Ibid., September 24, 1955, pp. 3,4.

⁶¹Ibid., October 5, 1955, p. 1.

⁶²Ibid., November 18, 1955, p. 8.

⁶³Ibid., November 3, 1957, p. 7.

Unions. While there were many references to union wages and some references to union activity at the University of Colorado in the Regents' Minutes, there were no references found that indicated union activity at the Medical Center between July 1952 and July 1961.

V. SUMMARY

The wage and salary program had led to increased salaries for nursing service positions. However, when the salary increases for nursing service positions were compared to non-nursing positions, only one of the non-nursing positions had a lower percentage of salary increase than the nursing service position to which it was compared.

The weighted-in-points plan of job evaluation had indicated that nursing service salaries should be increased. Yet the pay grades in which nursing service positions were placed were one to seven grades lower than the evaluation grades for the positions. The only non-nursing position of the group of positions studied placed in a lower pay grade than the pay grade determined by evaluation was the Clerk I.

A major factor in determining salaries was the prevailing rate paid in the community for comparable work. Other factors identified which had influenced salaries at the Medical Center were: (1) available funds, (2) supply of

personnel, and (3) cost of living. Union activity had not directly influenced Medical Center salaries.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Higher salaries for nurses had been considered essential to attract more people to nursing as a profession. Hospital leaders were recommending job analysis and job evaluation as a means of improving salaries for all hospital personnel.

The problem was to determine whether a job analysis and job evaluation program in a specific hospital had led to improvement in the nursing salaries. The University of Colorado Medical Center was chosen for the study. The Medical Center had had job classification studies made in 1948 and in 1957.

The goals of the present study were: (1) to identify changes in beginning salaries of nursing service positions; (2) to compare nursing service positions to selected non-nursing positions; (3) to determine the effects of job evaluation upon salaries; and (4) to identify other factors which had influenced the salary changes.

The review of literature revealed that job analysis and job evaluation were being used increasingly by industry. Hospitals were also showing increased interest in this method of wage and salary determination. Several reasons for the increased interest by hospitals were

discovered in the literature reviewed. Some of the reasons for hospital interest in job analysis and job evaluation were: (1) growth of the hospital industry, (2) recognition of sub-standard wages in hospitals, and (3) threat of union activity among hospital employees.

Nursing literature indicated that the nursing profession was just beginning to show an interest in job analysis and job evaluation as a method to improve salaries. No reports were found which discussed the effect that job analysis and evaluation had had upon nursing service salaries.

The historical method was chosen for this study. The "File on the Medical Center Pay Scale Since 1948," the minutes of the meetings of the University of Colorado Board of Regents and the report of the 1957 Job Classification Study at the Medical Center were included in the historical review.

Beginning salaries for six nursing service positions were compared with beginning salaries for twelve non-nursing positions. Each nursing service position was compared with two non-nursing positions. The percentage of the 1952 salary granted as salary increases between 1952 and 1961 was determined. With the exception of the X-Ray Technician whose increase in salary was thirteen and three tenths per cent less than the increase granted the Graduate Staff

Nurse, all of the non-nursing positions received a higher percentage of increase in salary than the individual nursing positions with which they were compared. This was in spite of the fact that the non-nursing positions were chosen because, at some time during the ten-year period studied, the nursing position and the non-nursing position to which it was compared had received the same beginning salary.

The Job Classification Study done in 1957 included nursing service positions although the evaluation points for nursing service positions were not included in the written report of the study. The evaluation points awarded to nursing service positions were available. All nursing service positions were evaluated above their assigned pay grade. The Head Nurse, Clinical Supervisor and Director of Nursing Service positions received total evaluation points which placed them above the highest pay grade on the University of Colorado Medical Center Pay Plan for 1958.

In spite of these evaluations, nursing service positions were not given salary increases to the level of the evaluated worth of the positions. At the same time, three non-nursing positions which, in 1956, were receiving salaries from twenty to eighty-two dollars per month higher than the evaluated worth of the job, received salary increases in 1958. Other non-nursing positions whose

salaries were below the evaluated worth received salary increases greater than the amount indicated by the evaluation points.

Four factors other than job analysis and job evaluation were identified as having influenced the salaries at the Medical Center. These were: (1) comparable rates in the community, (2) available funds, (3) supply of personnel, and (4) cost of living. The major factor in determining Medical Center salaries appeared to be the comparable rates paid for similar jobs in the community.

I. CONCLUSIONS

The data supported the hypothesis that although the method of job evaluation and wage determination was the same for nursing service positions and non-nursing service positions during the ten years from 1952 to 1962 at the Medical Center, the percentage of increase in beginning salaries had not been equal. The difference in amount of increase in beginning salaries was not the direct result of job evaluation. The beginning salaries were not determined on the basis of the evaluated worth of position, but were determined by the comparable wages in the community. The use of tax monies to finance the job analysis and job evaluation hardly appeared justified since the resulting salaries could probably have been

determined by the community wage surveys alone.

It appeared from this study that a job analysis and job evaluation program such as the one used at the Medical Center would result in an increase in beginning salaries for nursing positions, provided the hospital doing the evaluations could base the salaries upon the evaluated worth of the job rather than upon community rates.

The study also indicated that the Denver Hospital Council were united in setting nursing salaries. There were no references found in the Regents' Minutes which indicated that the Regents sought the opinion of the Denver Hospital Council regarding any salary rates other than those for graduate nurses. Since comparable nursing service positions are not found outside the hospital industry, hospital administrators could unite to control salary increases for this group.

II. RECOMMENDATIONS

On the basis of the findings in this study, it was recommended that:

1. Additional studies of job analysis and job evaluation as a method of determining nursing service salaries be done;
2. Hospital administrators be encouraged to use job

analysis and job evaluation in hospital wage and salary programs;

3. Ways be sought to make it possible for hospitals to pay nursing service employees the salaries determined by evaluation;

4. Studies be made of the factors which should be considered in evaluating nursing service positions. Such studies should consider the Functions, Standards and Qualifications which have been identified by the American Nurses' Association;

5. Findings of job analysis and job evaluation of nursing service positions be used in educational and public relations programs to justify increased salaries for nurses; and

6. The professional nurses be encouraged to accept responsibility, either individually or through their appropriate organizations, to develop methods of analyzing and evaluating nursing service positions.

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A P P E N D I X A

Position Descriptions

The following position descriptions were
taken from the University of Colorado Medical
Center Position Classification Plan, 1957.

HOSPITAL ATTENDANT

(Classification Number 520)

DEFINITION

This is elementary nursing work in the care and treatment of patients in a general or psychiatric hospital.

Emphasis of the work is on performance of routine nursing duties in a ward or hospital unit which do not require professional nursing training and can readily be learned on the job. Work usually is subject to the close supervision of nurses or other professional or technical hospital personnel but more routine tasks may be performed with considerable less supervision.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Assists the nursing staff in performing a variety of tasks such as sterilizing equipment and rinsing and washing nasal suction tubes, bottles, rectal tubes and other apparatus, wash basins, bedpans, and urinals; assists nurse make beds in orthopedic or critically ill patients.

Assists in moving patients who are heavy or helpless by turning them, by transferring them from a bed to a litter, or in other ways so as to assist the nurses caring for them.

Acts as messenger, transporting various types of equipment to other departments, getting and returning supplies to central supply and pharmacy.

Transport patients on litters or in wheel chairs to other departments of the hospital and return them to their wards after examination or treatment; may stay with patient during laboratory or x-ray procedure.

Attends and cares for disturbed or agitated patients, as directed, and exerts all possible precautions to prevent patients from injuring themselves.

Gives oral hygiene, shampoos, shaves.

Reports observations to nurse.

Participates in recreational therapy; gives support and assurance to patient by remaining with him as assigned by nurse.

Prepares patient for meals and serves food trays; fills water pitchers.

Takes temperatures, pulses, and respirations as indicated by nurse in charge.

Performs such custodial tasks as cleaning and dusting equipment, hospital units and utility rooms, assisting in moving beds and bedside stands.

HOSPITAL ATTENDANT (Continued)

Gives evening and morning care to chronic and convalescent patients; gives tub baths and checks patient in shower; passes and collects bedpans and urinals; gives cleansing enemas in uncomplicated cases.

Assists in maintaining ward ventilation, lighting, and other environmental factors that contribute to the comfort of the patient.

Performs related work as required.

REQUIREMENTS OF WORK

Some experience in the care of the physically or mentally ill; and graduation from high school or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Some knowledge of the procedural requirements of cleanliness and patient care normally expected in a hospital.

Ability and willingness to do routine cleaning and housekeeping work and to attend to the personal needs of the physically and mentally ill.

Ability to understand and follow simple oral and written instructions.

Ability to demonstrate empathy toward patients.

Ability to establish and maintain effective working relationships with physicians, nursing service personnel, students, patients and the public.

Ability to use discretion about confidential patient information.

Ability to work with physically and mentally ill without anxiety and tension.

Sufficient physical strength to work while standing and to lift and carry heavy objects.

CLERK I

(Classification Number 122)

DEFINITION

This is routine work required in specific clerical, office or similar procedures.

Work of an employee of this class is normally limited to standardized duties constituting a part of a complete operating procedure. Though work may occasionally involve the use of a typewriter, such assignments are ordinarily of a nature not requiring a qualified touch-typist for their execution. Work is performed under supervision, although after a brief period of instruction, repetitive assignments may be carried out with a minimum amount of review of work methods.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Sorts and files correspondence, vouchers, forms, hospital records and other materials numerically, alphabetically, or by other predetermined classifications.

Acts as desk clerk or receptionist in ward or clinic; answers inquiries according to established policies; records information on index cards, charts, and various forms.

Compiles tabulations from records at hand and prepares reports of a standardized and routine nature.

Performs simple typewriting assignments not requiring touch-typing skill, or uses other office equipment not requiring previous training or experience in operation.

Acts as cashier in food service unit.

Operates postage meter; maintains simple records and prepares charges for services.

Numbers, collates, punches and staples forms and other papers; cuts and folds paper.

May collect and deliver laboratory specimens, charts, reports, time sheets.

May take telephone messages and direct visitors.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Some office experience and completion of high school; or any equivalent combination of experience and training which provides the following knowledges, abilities and skills:

CLERK I (Continued)

Some knowledge of business English and arithmetic and of office practices and procedures.

Ability to understand and carry out simple oral and written instructions.

Ability to accurately sort and file alphabetically and numerically.

Ability to deal tactfully with the public, some of whom may be in disturbed condition.

Ability to acquire some skill in operation of office machines.

Ability to make simple arithmetic calculations.

Accuracy and neatness in recording information on reports and forms.

May be in position requiring ability to use discretion about confidential patient information.

Ability to establish and maintain effective working relationships with supervisor, employees, medical staff and students.

JANITOR

(Classification Number 204)

DEFINITION

This is manual work involving the custodial care of University buildings and premises.

Work involves the performance of cleaning and house-keeping maintenance work in an assigned building or building area. Primary responsibility is for the use of proper methods and materials in cleaning and otherwise caring for building areas and equipment. Employees work under close supervision or work follows a well established routine. Performance is evaluated by periodic inspection of work area.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Sweeps, mops, scrubs, and waxes floors; dusts and cleans offices, halls, classrooms, shops, and laboratories.

Uses standard cleaning equipment; also polishing and scrubbing machines.

Cleans rest rooms and replenishes supplies.

Moves office and dormitory furniture and equipment.

Reports conditions which may require major repairs.

Removes snow from steps, doorways, and entry side-walks.

May assist with other work in a department as time allows.

May be called on for emergency cleaning.

Empties waste and trash containers.

May be responsible for locking doors and windows after cleaning area.

Employees in this class employed by Medical School departments may care for animals.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

Some experience in janitorial or related custodial work; and completion of eighth grade; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Working knowledge of cleaning methods, materials, and equipment.

JANITOR (Continued)

Ability to make minor repairs and adjustment to building fixtures and equipment.

Ability to follow simple oral and written instructions.

Ability to exercise care in the use of cleaning materials for different types of building surfaces.

Satisfactory appearance and personal cleanliness.

Sufficient physical strength to withstand the strain of working long hours at manual tasks.

PRACTICAL NURSE

(Classification Number 521)

DEFINITION

This is nursing work of limited general duty responsibility in the care and treatment of the physically and mentally ill.

Under the supervision of a graduate nurse, employees in this class perform limited general nursing activities on a ward, in an operating room, in central supply or in a clinic. Work is performed in accordance with established rules and regulations and special instructions from medical or nursing supervisors. Work is subject to review and check by the professional nurse.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Takes and records pulse, respiration and temperatures; weighs patient and records.

Sets up clinics; prepares patients for doctor's examination and assists physicians in examining and treating patients.

Circulates with graduate scrub nurse; acts as scrub nurse for selected cases with graduate nurse circulating, assists graduate nurse in selecting and sterilizing instruments and setting up for selected operations.

Takes call with a graduate nurse.

Gives selected treatments such as unsterile hot packs, heat lamp, unsterile soaks, catheterization; gives routine skin care; gives cleansing enemas in uncomplicated cases. Cleans and stores instruments; assists with inventories.

Gives back rubs and baths to uncomplicated or convalescent patients; makes and straightens beds.

Records in patient's chart behavior, condition, treatment given, intake and output, T.P.R. and blood pressure, height and weight.

Observes and reports patient condition, behavior, color and condition of skin, state of consciousness.

Establishes therapeutic relationships with patients.

Assists in over-all nursing care plan for the patient.

Assists in socialization of the psychiatric patient.

Applies principles of psychiatry to patient care under the direction of the graduate nurse.

Assists the graduate nurse in performing a variety of technical duties.

Performs related work as required.

PRACTICAL NURSE (Continued)

RECOMMENDED QUALIFICATIONS

Graduation from an accredited school of practical nursing, or any equivalent combination of experience and training which provides the following knowledges, abilities and skills:

Working knowledge of nursing theory, practice and ethics under supervision.

Working knowledge of hospital dietetics, sanitation and personal hygiene.

Ability to follow oral and written instructions in exact detail and to record accurately.

Ability to maintain and demonstrate empathy toward patients.

Ability to work with the physically and mentally ill without anxiety and tension.

Ability to use discretion about confidential patient information.

Ability to establish and maintain effective working relationships with physicians, nursing service personnel, students, patients and the public.

Sufficient physical strength to work while standing and to assist or move patients and equipment for an eight-hour period or longer as necessary.

Skill in applying simple nursing techniques to specific needs.

NECESSARY SPECIAL REQUIREMENT

Possession of a current license as a practical nurse as issued by the Colorado Board of Licensed Practical Nurse Examiners.

COOK I

(Classification Number 226)

DEFINITION

This is general cooking work in a University and hospital kitchen.

Work is primarily concerned with volume cooking for a small group or supervised cooking for a large group and may include some general cleaning duties. Work is under close supervision or is sufficiently simple that limited cooking experience is required.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Assists, on a shift with other cooks, in preparing various foods including vegetables, meats and soups, or prepares complete meals for a small number of people.

May prepare special foods when preparation in volume is required.

Maintains sanitary conditions in kitchens and kitchen surfaces.

Prepares breakfasts and evening lunches on a relatively large scale.

Occasionally replaces higher level cooks on a relief basis.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

One year experience in household cooking; and completion of the eighth school grade; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Some knowledge of materials and methods used in preparing food on a large scale and of the care and use of cooking utensils and equipment.

Some knowledge of food values and nutrition.

Ability to do general cooking on a large scale and to plan and prepare small meals on a household scale.

Ability to work long hours while standing on concrete or tile floors and under conditions of high temperatures.

Ability to establish and maintain effective working relationships with supervisor and fellow employees.

Skill in the use of kitchen equipment.

Personal cleanliness.

SECRETARY I

(Classification Number 130)

DEFINITION

This is general clerical work which usually involves shorthand as an essential duty.

The clerical work follows prescribed or well established procedures and can be learned on the job. Instructions are given at the beginning of work and on subsequent new assignments. After employees become familiar with particular procedures they work with some independence on more routine aspects of the work. Work involving more varied tasks is given closer supervision than that which is repetitive in nature, although work is normally reviewed or verified upon completion. A secretary may make arithmetic or other checks upon work of other employees for accuracy and may be required to learn and use a limited technical vocabulary.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Takes and transcribes dictation consisting of correspondence, memoranda, reports, statements, and other materials; may cut duplicating stencils; types articles, reports, letters, forms, tabulations, and other materials from copy, rough draft, or dictating machine.

Acts as receptionist; schedules appointments; answers oral and written requests and inquiries for routine information; receives telephone calls and routes them to proper person.

Sorts and files correspondence, vouchers, pamphlets, books, documents, and other materials numerically, alphabetically, or by other predetermined classification; receives, sorts, and distributes incoming and outgoing mail.

Checks records and papers for clerical and arithmetic accuracy, completeness, and compliance with well established standards and procedures; makes entries of designated or obvious information to various control records; occasionally prepares standard reports from such records.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

One year of experience in general clerical work; and graduation from a standard high school including or

SECRETARY I (Continued)

supplemented by courses in typing and shorthand; or any equivalent combination of experience and training which provides the following knowledges, abilities and skills:

Working knowledge of business English, spelling and arithmetic.

Some knowledge of office practices, procedures and equipment.

Ability to make computations and tabulations rapidly and accurately.

Ability to learn assigned clerical tasks readily, to adhere to prescribed routines, and to develop some skill in the operation of other common office appliances.

Ability to deal tactfully with the public.

Ability to learn technical terms used in work assigned.

Ability to perform detailed tasks accurately.

Ability to use discretion about confidential information.

Skill in the rapid and accurate taking and transcription of oral dictation.

Skill in the operation of a typewriter.

Clerical aptitude and good general intelligence.

Ability to establish and maintain effective working relationships with supervisor and employees.

GRADUATE STAFF NURSE

(Classification Number 522)

DEFINITION

This is professional nursing of general duty responsibility in the care and treatment of the mentally and physically ill.

Employees in this class perform general nursing activities on a hospital ward, operating room, or in a hospital clinic. Work is performed in accordance with established rules and regulations, standard practices of the profession, and special instructions from medical or nursing supervisors. On any shift, employees of this class may have charge responsibilities for an assigned ward or hospital area. The treatment and care to be given is usually supervised and subject to review and check by superiors. Serves as a "nursing team leader" and directs the activities of other professional and non-professional personnel in a variety of nursing care activities.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Sets up or prepares and administers, as medically ordered, medications orally, subcutaneously, intramuscularly, rectally; verifies dosage for correctness; sets up and prepares medications for administration by doctor; transcribes written doctor's orders; records in patient chart medications administered.

Observes and reports drug idiosyncrasy, desirable and undesirable effect.

Maintains close constant observation of vital signs, color and condition of skin, drainages, state of consciousness.

Anticipates and fulfills doctor's need for medications, instruments, facts about patient's clinical condition.

Takes and records temperature, pulse, blood pressure, fetal heart tones; measure and records intake and output; weighs patient and records.

Takes variety of cultures and specimens using sterile, unsterile or special technique as required.

Sets up for and assists doctor with dressing changes, blood drawing, lumbar punctures, physical examinations, intravenous therapy, pelvis examinations, gastric analysis or lavage, thorocentesis, biopsies.

GRADUATE STAFF NURSE (Continued)

Gives treatments, as ordered, such as oxygen therapy, sterile hot packs or soaks, bladder irrigations, dressings, catheterization, gavage, steam or penicillin inhalation, prepared gargle, oral aspiration, tracheotomy care.

Establishes therapeutic relationships with patient by trying to understand patient's feelings when multiple, suppressed, denied, acted out or where opposite feelings exist; by communicating and relating verbally and non-verbally to patients with various mental illnesses; by listening attentively; by understanding and accepting patient as and where he is; by participating in nursing skills such as reality testing, supportive or relationship therapy, attitude therapy; by furnishing opportunities for resolving anxiety and minimizing frustration.

Instructs patient in urine examination, specimen collection, communication and prevention of disease, dietary patterns, premature infant care.

Observes symptoms, makes judgments based thereon, acts as indicated, as giving prescribed medication or treatment, institutes emergency measures, reports to doctor.

EXAMPLES OF WORK

Participates in the doctor's psychotherapeutic plan for the patient.

Participates in and conducts team meetings in total patient care.

Participates in medical and nursing research.

Instructs and interprets to and demonstrates to patient and/or family plans regarding care, about home care to chronic, terminal, long or short term illness.

Anticipates safety precautions for patients.

Supervises and participates in patient care including making beds, changing linens, lifting and moving patients, walking patient, preparing and serving trays and special feedings, giving baths and back rubs.

Acts as scrub nurse or circulating nurse during operations; prepares operating room; sets up tables and trays required; lays out instruments, sponges, sutures, needles and other supplies.

Prepares supplies, instruments and other items for autoclaving; makes solutions, packs and trays; checks dates of sterile supplies.

Assists student nurses in learning specific techniques of patient care on the service to which the student is assigned.

GRADUATE STAFF NURSE (Continued)

Records in patient's chart behavior and symptoms, condition, treatments and medications, reaction to visitors, verbatim conversation, research studies.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Graduation from an accredited school of nursing; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Working knowledge of professional nursing theory, practice and ethics.

Working knowledge of materia medica, hospital dietetics, sanitation, and personal hygiene.

Working knowledge of current and newer methods of total patient care.

Knowledge of legal implications of mental and physical illness.

Ability to follow oral and written directions in exact detail and to maintain a helpful, empathetic attitude toward patients.

Ability to instruct patients and interpret plans, procedures and policies to patients, families, students and other nursing service personnel.

Ability to establish and maintain effective working relationships with personnel of other departments, nursing service personnel, students, patients, and the public.

Ability to use discretion about confidential information.

Ability to maintain adequate and accurate records.

Ability to work with the physically and mentally ill without anxiety and tension.

Ability to grow professionally through experience and education.

Ability to apply principles of psychology, mental hygiene and mental illness.

Ability to be friendly, pleasant and enthusiastic.

Ability to be stable and emotionally mature.

Sufficient physical strength to work while standing and to assist or move patients and equipment for an eight-hour period or longer when necessary.

Skill in applying nursing techniques to patients who are mentally and physically ill.

Ability to work effectively under sustained physical and emotional stress.

GRADUATE STAFF NURSE (Continued)NECESSARY SPECIAL REQUIREMENT

Possession of a current license as a registered nurse as issued by the Colorado State Board of Nurse Examiners.

X-RAY TECHNICIAN

(Classification Number 569)

DEFINITION

This is technical work in the operation of a variety of x-ray equipment.

Work involves responsibility for taking and developing x-ray films in accordance with orders of physicians. Although work follows a standardized procedure employee must exercise initiative and judgment in modifying techniques to individual patient situations. Employees in this class may operate x-ray and radiation therapy equipment under the direct supervision of a physician. Work may include assisting with fluoroscopic examinations. Work is reviewed by those interpreting the finished x-ray.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Prepares patients for x-ray examinations; takes diagnostic x-rays as directed by physician; assists in treating diseased areas by exposing prescribed area to specified concentrations of rays for specified periods of time.

Processes the films by developing, rinsing, fixing, washing, and drying; changes the processing solutions and makes new solutions by mixing prepared ingredients for each.

Records and files x-ray films, reports, and therapy records.

Makes appointments for patients, takes case histories.

Operates x-ray machine for fluoroscopic work, and mixes contrast media for patients to drink.

Cleans the x-ray machine and film holders.

Participates in teaching x-ray technician students.

Prepares and administers barium sulfate; prepares other contrast media for doctor.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Graduation from a standard high school with courses in chemistry and physics and completion of an approved two-year course in x-ray techniques; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

X-RAY TECHNICIAN (Continued)

Working knowledge of techniques of x-ray technology; the operation and care of equipment; and understanding of hazards involved and safeguards.

Working knowledge of anatomy and physiology.

Knowledge of psychology, patient care and sterile techniques to deal with all types and conditions of patients.

Ability to use considerable initiative and judgment in determining proper anatomical posture for patients depending upon areas to be radiographed.

Ability to exercise safety precautions for patients undergoing treatment or diagnosis.

Ability to understand and effectively carry out complex oral and written instructions.

Ability to establish and maintain effective working relationships with employees, patients, medical staff and students.

Ability to use discretion about confidential patient information.

Skill in operating x-ray machines and in developing films.

Ability to work long hours while standing.

Special requirement: Registration by the American Registry of X-Ray Technicians.

MEDICAL TECHNOLOGIST I

(Classification Number 573)

DEFINITION

This is technical analytical work in a medical diagnostic laboratory.

Emphasis of the work is on the performance of a great variety of standard serological, bacteriological, hematological, and biochemical laboratory tests. A technical or professional supervisor makes general work assignments to employees of this class and provides advice and assistance in complex work methods. These employees also receive instructions regarding methodology in connection with the application of new testing techniques.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Performs a variety of bacteriological examinations on such specimens as feces, urine, sputum, spinal fluids, blood, and other body fluids; cultures for the presence of enteric diseases, diphtheria, and pneumococcic, streptococcic, and staphylococcic infections; prepares a variety of culture media for the identification and description of organisms sought in the examination of the cultural and microscopic characteristics.

Inoculates animals as a method of culture to determine the pathogenicity of an organism.

Performs serological examinations of blood for typhoid, paratyphoid, dysentery, tularemia, typhus, spotted fever, infectious mononucleosis and syphilis.

Stains, smears and examines smears under microscope for gonorrhea; plants and isolates the gonococci for cultures.

Makes chemical analyses of blood and other body fluids to determine the quantitative presence of non-protein nitrogen, creatinine, blood and spinal fluid, sugars, total protein, blood calcium, and other chemical components.

Examines urine specimens microscopically for presence and identification of such objects as casts, cells, and bacteria.

Performs hematological examinations, making complete blood counts, smears for differential count and blood groupings; determines sedimentation rates and bleeding and clotting times, making platelet and reticulocyte counts and gravidity tests; and examines smears for malarial parasites.

MEDICAL TECHNOLOGIST I (Continued)

Performs skin testing in allergy clinic; prepares and sterilizes a variety of antigens; makes pollen count.

Makes bacteriological and chemical examinations of milk, ice cream, and other dairy products.

Prepares written reports of tests made and summaries of volume of work.

Draws blood from donors, types, tests, and cross-matches donors' blood, aspirates plasma from settled red cells, and examines plasma cultures for sterility.

Assists in teaching practical work to medical technology students.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Completion of the college or university course work and approved hospital affiliation in medical technology required for A.S.C.P. registration; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Working knowledge of the principles, methods, materials and techniques of medical technology.

Working knowledge of the basic principles of chemistry, biology, and bacteriology as related to medical technology.

Ability to perform assigned tasks according to exactly prescribed procedures, and to make accurate observations of test results.

Ability to prepare accurate records of laboratory tests.

Ability to use discretion about confidential patient information.

Ability to establish and maintain effective working relationships with supervisor, employees and patients.

Eyesight sufficiently strong to permit extended microscopic work and normal color perception.

Skill in laboratory manipulative techniques.

Special requirement: Must have or be eligible for A.S.C.P. registration.

HEAD NURSE

(Classification Number 524)

DEFINITION

This is professional nursing work involving immediate supervisory responsibility for nursing service of a hospital ward or similar unit.

Work involves responsibility for the nursing service of a nursing unit, for assisting in the over-all supervision of nursing services on an evening or night shift, or for the operation of a central nursing supply unit for all wards. Employees in this class are responsible for directing and supervising the work of a number of professional and non-professional nursing personnel, for assisting in the execution of a practical on-the-job training program and for assisting in the development of professional skills in student nurses. Work involves exercising considerable independent judgment and initiative in accordance with established regulations and policies of the hospital. Work is subject to daily review by nursing supervisors through ward visits and report analyses and special instructions regarding the care and treatment of patients are received from medical and nursing superiors.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Orients, assigns, supervises, and assists general staff nurses, student nurses and non-professional staff assigned to the care and treatment of patients of the unit and in assisting the medical staff as required; evaluates performance of staff assigned. Performs similar functions in relation to volunteers.

Gives informal instruction to nursing students regarding suitable methods and techniques of nursing services in the field of specialization.

Confers with nursing supervisors and physicians concerning the care of individual patients and the administrative and supervisory problems of the unit.

Reviews and prepares reports about the ward operation, requisitions supplies and equipment, and analyzes nursing services.

Prepares time schedules for unit personnel and keeps records of hours worked.

Assists evening or night supervisors in making rounds of hospital wards, observing condition of patients seriously ill, observing general conditions on wards; acts as evening or night supervisor in a relief capacity.

HEAD NURSE (Continued)

Keeps records, writes clinical progress records on patients, reports to physicians.

Supervises nursing service in a group of clinic services of the hospital out-patient department; orients, assists, and supervises nursing service personnel assigned to clinic services.

Supervises nursing functions and special procedures incident to medical or nursing research.

Orients, supervises and instructs student nurses, graduate nurses, and hospital attendants in the sterilization of equipment and supplies and the issuing, examination and inventorying of equipment in a central supply unit; examines and recommends use of new products and equipment.

Makes reports and observations of patient's condition; observes patient's condition and determines need for attending physician; institutes emergency procedures as needed.

Interprets community resources available for continuity of patient care.

Makes recommendation for personnel and equipment for budget preparation.

Coordinates the service of nursing personnel in the unit with other hospital departments.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Two years of experience in hospital nursing, including some supervisory experience; and graduation from an accredited school of nursing with a bachelor's degree, supplemented by graduate training in the assigned field of specialization or any equivalent combination of experience and training which provides the following knowledges, abilities and skills:

Considerable knowledge of professional nursing theory and practice, including knowledge of the field of specialization to which assigned.

Working knowledge of the administrative and supervisory problems involved in nursing management.

Working knowledge of legal aspects in field of specialization.

Working knowledge of modern teaching methods applied to informal nursing instruction for ward personnel, nursing and medical students.

Working knowledge of administrative and clerical policies and procedures of the hospitals.

Ability to supervise the application of nursing techniques to routine and complex patient care situations.

Ability to instruct nursing and attendant employees and to interpret patient problems.

HEAD NURSE (Continued)

Ability to maintain adequate records of nursing services.

Ability to establish and maintain effective working relationships with the personnel of other departments and nursing service personnel, and to maintain a sympathetic attitude toward patients and their families and visitors.

Ability to use discretion about confidential information.

Ability to work effectively under sustained physical and emotional stress.

Ability to maintain friendly relationships with the public, including representatives of the radio and press.

Sufficient physical strength to do occasional lifting and to work long periods while standing or walking.

Ability to teach inter-personal skills to nursing personnel.

Ability to demonstrate effective methods of patient approach with seriously disturbed psychiatric patients.

Ability to be objective in problem solving and fact finding.

Ability to communicate productively with nursing service and allied disciplines.

Skill in demonstrating general and specialized nursing techniques.

NECESSARY SPECIAL REQUIREMENT

Possession of a current license as a registered nurse as issued by the Colorado Board of Nurse Examiners.

Ability to work with mentally and physically ill without anxiety and tension.

ELECTRICIAN

(Classification Number 303)

DEFINITION

An employee in this class performs skilled electrical work in the installation, alteration, maintenance, and repair of electrical systems and equipment. Assignments are received orally or in writing and may be accompanied by penciled sketches or blueprints. Work is usually performed independently in accordance with standard trade practices but is inspected by a supervisor upon completion. Supervision may be exercised over apprentices and helpers.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Installs and maintains primary distribution systems, circuit breakers, and transformers.

Installs secondary distribution systems in new construction and remodeling and maintains all primary and secondary systems.

Installs and maintains electric wiring, motor wiring, and lighting systems in buildings.

Maintains and repairs elevator equipment, oxygen tents, inhalators, electric irons, clocks, ovens, and small motors.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

Four years of experience as a skilled electrician or completion of a recognized apprenticeship in this work; and graduation from a standard high school or vocational school; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Considerable knowledge of the tools, materials, methods, and practices of the electrical trade.

Working knowledge of the occupational hazards and safety precautions of the electrical trade.

Working knowledge of the electrical code of Denver.

Ability to work from penciled sketches and blueprints.

Ability to keep work records and prepare simple reports.

Skill in using the standard tools and equipment of the trade.

ELECTRICIAN (Continued)

Skill in locating and correcting defects in electrical systems and equipment.

Ability to work for extended periods while standing.

Ability to establish and maintain effective working relationships with supervisor, fellow employees and personnel in departments where work is being done.

DIETITIAN I

(Classification Number 234)

DEFINITION

This is professional dietary work in the preparation and serving of foods or as therapeutic dietitian in the University hospitals.

Employees in this class have immediate responsibility for the preparation of foods, the sanitary serving of foods in the hospital cafeterias and wards. Work involves the supervision of a number of employees in food preparation or food serving. Dietitian I's conduct classes in food sanitation for Food Service Workers or in dietary habits for hospital patients, and assists in training dietary interns. Work is performed under the general direction of and reviewed for results by the immediate supervisor.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Prepares modified diet menus for patients having diabetic, nephritic, cardiac, and other conditions requiring modified dietary treatment; supervises the preparation and serving of modified diet foods in order to maintain conformity with individual dietary prescriptions.

Gives dietary instructions to patients being discharged from the hospital.

Gives occasional lectures to student nurses and dietary interns on the theory and practical application of dietary principles.

Supervises the serving of food in hospital cafeterias and wards; makes occasional rounds of food serving units and hospital wards to check the appearance of employees serving food, the appearance of food and trays, the manner in which food is served, and the amount of food served.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Graduation from a four year college or university with major course work in dietetics, and completion of a dietary internship in an approved institution; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

DIETITIAN I (Continued)

Working knowledge of the modern principles and practices of dietetics.

Working knowledge of food preparation and food service.

Ability to analyze the problems inherent in satisfying the food tastes of hospital patients in accordance with dietetic standards.

Ability to plan menus which will meet rigid requirements as to caloric, mineral, and vitamin food content.

Ability to supervise assistants in the preparation and serving of food to hospital patients and employees.

Ability to establish and maintain effective working relationships with patients and hospital personnel.

Ability to maintain records of food served, diets prepared, and other work performed in the food units.

Special requirement: Member of American Dietetic Association.

CLINICAL SUPERVISOR

(Classification Number 526)

DEFINITION

This is supervisory and administrative professional nursing involving immediate supervision of two or more clinical units.

Work involves responsibility for maintaining good standards of nursing care, supervising the nursing service of two or more units and coordinating nursing care with medical care. Employees in this class are responsible for adequate nursing service staffing to meet patient load, for adequate supplies and equipment to meet area needs. All work is performed under the administrative direction of the office of the Nursing Service Director.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Maintains general supervision of the nursing care given to patients and all nursing activities within the nursing units.

Analyzes and evaluates the kind and amount of nursing service required in the nursing units and, in cooperation with the Head Nurses, planning for effective administration in each unit.

Plans with the medical staff and other department in relation to the care of patients.

Interprets the principles of good management to Head Nurses and encourages them to apply these principles in their daily work.

Helps to provide a comfortable, orderly, clean, and safe environment for patients.

Assists Head Nurses plan the time of nursing personnel and the assignment of duties so as to facilitate prompt and effective performance.

Evaluates and records the quality of the service given by Head Nurses, assisting them with the evaluation of other members of the nursing personnel, and individual counseling on the basis of findings.

Plans for and participates in the teaching of all professional personnel in the program of staff education including the in-service education and orientation of new personnel.

Assists in the planning for and participates in the training and orientation of auxiliary personnel.

CLINICAL SUPERVISOR (Continued)

Assists in the development of teaching programs for patients.

Coordinates the services rendered by other professional personnel with those of the nursing personnel within the nursing units, in the interest of adequate patient care.

Interprets and administers policies of the hospital and nursing service administration; prepares reports and analyses of services.

Keeps the nursing service administration informed of the needs of the nursing units and of any special problems.

Supervises the securing, care, and maintenance of equipment and supplies.

Assumes responsibility for duties in the Nursing Service Office when requested.

Maintains liaison with various Public Health and allied agencies; supervises all referrals to Public Health Services.

Assists in direct patient care as a teaching device or in case of stress.

Assists in applying specialized nursing principles such as psychiatric, premature or medical.

Maintains effective communication with allied disciplines for patient care.

Sets up goals for growth and development of individual capacities in personnel.

Utilizes inter-personal skills effectively.

Explains the meaning of behavior to personnel.

Interprets to personnel doctor's psychotherapeutic plan for patients when indicated.

Demonstrates the objective method in fact finding when problems arise.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

Four years of experience in nursing, including supervisory experience, graduation from an accredited school of nursing with a bachelor's degree supplemented by graduate training in nursing education and administration; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Thorough knowledge of professional nursing theory and practice, including knowledge of the field of specialization to which assigned.

CLINICAL SUPERVISOR (Continued)

Thorough knowledge of psychotherapeutic techniques and its application to psychiatric nursing.

Some knowledge of allied therapies in patient care.

Considerable knowledge of the administrative and supervisory problems involved in supervision of two or more units.

Working knowledge of the rules, regulations, and policies of the other departments of the hospital.

Working knowledge of legal aspects in field of specialization.

Ability to supervise the application of nursing techniques to routine and complex care situations.

Ability to use previous training and experience in making rapid and sound decisions with respect to patients and hospital personnel in the absence of superiors.

Ability to instruct nursing and attendant employees and to understand and interpret patient behavior and illness in order to achieve better patient care.

Ability to maintain adequate records of nursing services.

Ability to establish and maintain effective working relationships with personnel of other departments, nursing service personnel, and student nurses, and to maintain a sympathetic attitude toward patients, including families and friends.

Ability to prepare and present a variety of reports on activities in a clinical area.

Ability to maintain friendly relationships with the public, including representative of the radio and press.

Ability to work effectively under sustained and emotional stress.

Ability to grow professionally.

Ability to demonstrate good judgment, and intellectual, emotional and social maturity.

Ability to participate in research.

Ability to evaluate objectively in problem situations.

Ability to use discretion about confidential information.

Skill in demonstrating general and specialized nursing techniques.

NECESSARY SPECIAL REQUIREMENT

Possession of a license as registered nurse as issued in the Colorado State Board of Nurse Examiners.

MEDICAL SOCIAL WORKER I

(Classification Number 547)

DEFINITION

This is professional medical social work with hospital and clinic patients.

Employees in this class are primarily responsible for assisting individual patients in overcoming social and emotional obstacles which prevent effective medical treatment and in adjusting to the social and economic problems of physical disability. Work involves the study and evaluation of the environment, personality, and attitudes of the patient toward his illness, interpretation of pertinent social and economic factors to the medical staff, and participation in the preparation of adequate plans for the adjustment of individual patients in accordance with the medical and social factors involved. Employees in this class are also responsible for effectively demonstrating to professional medical and nursing personnel the importance of the social aspects of medical care. Work is performed under the direction of a supervising case worker and is reviewed in staff conferences.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Interviews individual patients and members of their families in the diagnosis and evaluation of personal problems; encourages patients to talk about problems, and discusses with the patient plans for his medical care and adjustment.

Interprets to the medical and hospital staff those social, economic, environmental, and personal factors of a case related to the medical care and rehabilitation of the patient.

Interprets the medical condition of the patient as related to his employment limitations and financial needs to welfare agencies and other groups whose cooperation is needed in the planning and execution of adequate plans for the rehabilitation of the patient.

Assists in interpreting the medical condition and treatment of the patient to the individual patient and his family and arranges talks with attending physicians.

Participates in meetings of various welfare agencies for the development and utilization of resources to meet the needs of patients.

MEDICAL SOCIAL WORKER I (Continued)

Confers with case workers of higher grade or the Director of Medical Social Service on complex professional and patient problems and submits case reports for review.

Prepares case histories and written reports.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

The completion of a master's degree from a recognized school of social work with specialization in hospital social service; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Working knowledge of the principles and techniques of social case work.

Working knowledge of the medical-social implications of disease.

Working knowledge of the basic policies and procedures prevailing in hospitals governing medical social service for clinic and hospital patients.

Working knowledge of medical terminology and of the social effects of diseases and physical and emotional disabilities upon the patient and his family with respect to economic, environmental, and social factors.

Ability to work with and obtain cooperation of physically and mentally ill patients and their families.

Working knowledge of welfare resources and ability to utilize these to meet patient needs.

Ability to establish and maintain effective working relationships with hospital professional personnel and with other welfare agencies.

Ability to apply case work techniques and practices to medical situations.

Ability to prepare concise and complete case records and reports.

Ability to use discretion about confidential patient information.

(A recognized school of social work shall mean a school accredited by the Council on Social Work Education.)

ACCOUNTANT I (MEDICAL CENTER)

(Classification Number 166)

DEFINITION

This is professional accounting work involving varied duties in fiscal control and reporting.

Work involves varied assignments in the operation of a central accounting system including the assembly and analysis of data, the preparation of statements and reports, and the rendering of technical assistance to students and employees. The technical difficulty of work varies among positions allocated to this class, but where accounting work is less difficult, there is added responsibility for a wider variety of duties relative to reporting and technical assistance to others. Until the more complicated phases of the work are learned, employees work under close supervision, but after this period specific instructions are generally given only at the beginning of new work or when new procedures are instituted. Work is verified by accounting checks and controls. Works under general supervision of Chief Accountant or Accountant II's. Work assignments may be received in oral form as to objectives desired. Policies and procedures are set and an employee in this class may use established techniques to examine special problems.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Makes adjusting entries; takes trial balances.

Verifies accounting entries for propriety; prepares reports on financial status of varied projects.

Audits and verifies accounts.

Assists Chief Accountant in preparation of monthly dietary report and cash report.

Assists Accountant II's in preparing reports and examination of amounts for propriety.

Makes internal audit of patient's accounts receivable.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

Some experience in governmental or commercial accounting; and graduation from a four year college or university with major course work in accounting and business administration; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

ACCOUNTANT I (MEDICAL CENTER) (Continued)

Working knowledge of the principles and practices of governmental and commercial accounting.

Working knowledge of modern office practices, procedures, methods, and equipment.

Ability to examine and verify financial documents and reports.

Ability to do some original work in the handling of special accounting assignments.

Ability to prepare financial statements and reports.

Ability to establish and maintain effective working relationships with students, faculty, and other employees.

NURSING SERVICES ADMINISTRATOR [1]

(Classification Number 540)

DEFINITION

This is administrative and professional work in the direction of all nursing services in the University Hospitals and Clinics.

Emphasis of the work in this class is on the direction and supervision of all nursing services in the general and psychiatric hospitals of the University. Work involves responsibility for thorough analysis of nursing service procedures and methods and for the development of new techniques of administration and nursing service. In collaboration with School of Nursing personnel, the employee formulates general policies relating to the integration of nursing services and nursing education of student nurses. Work involves considerable independent judgment and initiative based on previous experience and training in the field of nursing administration. Work is subject to the general administrative direction and supervision of the Coordinator of Patient Services.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Develops and executes plans for the organization, direction and supervision of nursing service and for the improvement and reorganization of existing methods in the care and treatment of the mentally and physically ill.

Initiates and supervises studies to determine the validity of existing methods and procedures of nursing care; confers with Coordinator of Patient Service, School of Nursing personnel and related department heads in the development of new and reorganized departments including the preparation of plans for equipment and staff and the outlining of policies and techniques.

Reviews and analyzes reports from administrative nursing personnel, confers with nursing personnel concerning problems of nursing service; and makes hospital rounds with hospital administrators and nursing service personnel.

[1] The job classification title for this position was changed to Director of Nursing Service on December 15, 1961. A copy of the memorandum regarding the change is included in the "File on Medical Center Pay Scales Since 1948."]

NURSING SERVICES ADMINISTRATOR (Continued)

Initiates annual budget for nursing service; directs and supervises the preparation of special administrative reports and statistical studies; prepares memoranda concerning new nursing service policies or changes in policies.

Interviews and recommends the appointment of administrative personnel; supervises the selection of nursing personnel and makes recommendations concerning the selection, placement, transfer, and promotion of nursing personnel.

Attends and participates in nursing and hospital staff conferences and in local, state, and national nursing institutes and meetings.

Conducts formal academic training classes in nursing and in nursing service administration and serves on advisory committees for theses of graduate students.

Supervises and participates in the development of orientation programs for nursing personnel.

Performs related duties as required.

RECOMMENDED QUALIFICATIONS

Nine years of experience in hospital nursing including experience in nursing administration; and graduation from an accredited school of nursing, with a bachelor's degree plus a master's degree with specialization in nursing administration; equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Extensive knowledge of professional nursing theory and practice.

Thorough knowledge of administrative and supervisory problems in nursing service administration.

Working knowledge of legal aspects in nursing.

Considerable knowledge of modern teaching methods as applied to graduate and student nurse instruction with particular reference to nursing techniques used in various fields of specialization.

Ability to plan and organize nursing services to meet effectively the needs of fluctuating clinic and hospital patient loads.

Ability to establish and maintain effective and cooperative working relationships with hospital administrators, physicians, Medical Center department heads, nursing service personnel and the general public.

Ability to perform a wide variety of administrative and supervisory office tasks related to the operation of a large nursing service.

NURSING SERVICES ADMINISTRATOR (Continued)

Ability to supervise the establishment and maintenance of adequate records relating to nursing services and personnel.

Ability to effectively guide nursing service committees established to study and recommend various nursing service activities.

Ability to prepare and present effectively a variety of reports on nursing service operation and research.

Ability to use discretion about confidential information.

Ability to work effectively under sustained emotional and physical stress.

Ability to maintain friendly relations with the public, including representatives of the press and radio.

NECESSARY SPECIAL REQUIREMENT

Possession of a current license as a registered nurse as issued by the Colorado State Board of Nurse Examiners.

DIRECTOR OF MEDICAL SOCIAL SERVICE

(Classification Number 554)

DEFINITION

This is administrative and professional work involving the direction of all medical social work services in the University general hospital and clinic contributing to the total clinical program related to comprehensive medical care of patients.

Emphasis of the work is on the development and the execution of an over-all program for medical social service involving the development of uniform standards, policies, and procedures and the general supervision of medical social workers. The person in this position participates in the development of teaching programs when the social aspects relate to the medical treatment program. In addition, participates in the teaching of medical, nursing, and paramedical students. Is responsible for giving leadership in community health programs and participating in rehabilitation organizations. The broad outlines of the program are planned in consultation with the Director of Hospitals and chiefs of service, and work is evaluated through periodic conferences and the submission of reports and statistics to superiors.

EXAMPLES OF WORK (These examples are intended only as illustrations of the various types of work performed in positions allocated to this class.)

Develops and executes an over-all program for medical social services in a general hospital.

Evaluates the over-all progress of the social service department, confers with the hospital director and other staff, and develops changes in procedure and workload when necessary.

Recruits, recommends appointments and terminations, and orients new social workers.

Makes determinations of personnel and social service needs and makes work assignments of professional workers.

Consults with and advises medical social workers concerning case histories, reviews written case histories, conducts staff conferences, and evaluates the quality and quantity of an individual worker's accomplishments.

Gives talks, attends public meetings, and otherwise promotes and interprets medical social service and hospital programs.

Gives lectures to medical, nursing, paramedical students, and to post-graduate students in the social aspects of patient care.

DIRECTOR OF MEDICAL SOCIAL SERVICE (Continued)

Participates in planning the content of courses for teaching the social aspects of patient care in the medical school curriculum.

Participates in furthering Medical Center public relations by working with various community groups.

Recommends expenditure of funds restricted to meeting patient needs.

Evaluates and consults with social work school administrators on the field work experience of social work students in our setting.

Performs related work as required.

RECOMMENDED QUALIFICATIONS

Eight years of experience in hospital social case work, including supervisory experience; and completion of a master's degree in a recognized school of social work, with specialization in the field of hospital social service; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Extensive knowledge of the principles and techniques of medical social service and case work.

Thorough knowledge of the medical-social implications of disease.

Thorough knowledge of the basic policies and practices prevailing in hospitals governing medical social service for clinic and hospital patients.

Considerable knowledge of medical terminology and of social effects of diseases and of physical and emotional disabilities upon the patient and his family with respect to economic, environmental, and social factors.

Ability to develop and execute a comprehensive and integrated program for medical social service.

Ability to direct and supervise medical social workers in the application of case work techniques and practices.

Extensive knowledge of welfare resources and ability to utilize these to meet patient needs.

Ability to establish and maintain effective and co-operative relationships with hospital professional personnel and with other welfare agencies.

Ability to prepare complete and concise case records and reports.

Ability to present ideas, facts, and recommendations effectively in oral and written form.

DIRECTOR OF MEDICAL SOCIAL SERVICE (Continued)

Ability to use discretion about confidential information.

(A recognized school of social work shall mean a school accredited by the Council on Social Work Education.)

A P P E N D I X B

Job Evaluation Plan

The following material is taken from
"Recommended Staff Classification and Compensation
Program for the University of Colorado Medical
Center, Denver," An Unpublished Report of a Study
Directed by Leota Pekrul and Otis Lipstreu, 1957,
pp. 5, 6, 17, 33-38.

UNIVERSITY OF COLORADO

MEDICAL CENTER

JOB EVALUATION PLAN

1956

Job evaluation is the process of making a thorough analysis of certain factors which make up the requirements of any job.

Because the ultimate objective of job evaluation is to establish an equitable schedule of wages or salaries, there must be a definite relation between one job and another, ranging from those of minimum difficulty and responsibility to those of maximum difficulty and responsibility. To determine this relative value, it is necessary to make a job-to-job comparison considering single factors, rather than to attempt an overall comparison of jobs. In order to reduce errors in judgment to a minimum, each of the major factors is sub-divided into degrees with a concise definition for each degree.

The factors listed below form the basis for analysis and evaluation, in that they cover phases of all jobs which tend to justify salary differentials. The number of points to be allowed for the degrees in each factor has been adapted from tables developed in evaluating thousands of jobs.

FACTORS	Degrees and Points					
	1	2	3	4	5	6
1. Previous Related Experience Required	20	30	40	55	75	100
2. Education Required	15	25	35	45	60	80
3. Scope of Duties	10	20	30	40	55	70
4. Initiative Required	5	10	20	30	40	50
5. Responsibility for Supervising	5	10	15	25	35	50
6. Responsibility for Safety of Others	5	10	15	25	35	45
7. Contacts Required	5	10	15	20	30	40
8. Mental Effort Required	5	10	15	20	30	40
9. Responsibility for Error	5	10	15	20	30	40
10. Physical Effort Required	5	10	15	20	25	30
11. Working Conditions	5	10	15	20	25	30

PLEASE REMEMBER THAT THIS PLAN INTENDS TO EVALUATE THE JOB, RATHER THAN THE PERSON DOING THE JOB.

The following pages sub-divide each factor into degrees, with comprehensive definitions for the guidance of those who are evaluating the job. Points allowed for each degree are listed in parentheses.

Factor 1 Previous Related Experience Required

This factor measures the amount of experience required, in addition to the education required, in order to satisfactorily perform the duties of the position.

1st degree	(0-20)	Up to six months
2nd degree	(20-30)	Six to twelve months
3rd degree	(30-40)	One to two years
4th degree	(40-55)	Two to three years
5th degree	(55-75)	Three to five years
6th degree	(75-100)	Five years and over

Factor 2 Education Required

This factor measures the amount of education required, to perform the job satisfactorily.

1st degree	(15)	Grammar school education or equivalent
2nd degree	(25)	Two years of high school or trade school, or equivalent
3rd degree	(35)	Graduation from high school, business school, or equivalent
4th degree	(45)	Two years of college training or equivalent, with courses applicable to duties.
5th degree	(60)	College or University degree or equivalent, with training in a specialized field applicable to duties
6th degree	(80)	College or University degree plus one or more years of study related to the duties of this position

Factor 3 Scope of Duties

This factor measures the overall complexity of the job, including the functions and responsibilities.

1st degree	(10)	Simple routine duties requiring little individual judgment Procedure is clearly defined and the work is performed under close supervision.
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2nd degree	(20)	Routine duties requiring the application of prescribed methods and procedures. Work involves the making of minor decisions under supervision.
3rd degree	(30)	Duties are varied and involve a knowledge of functions in a Department or Budget Unit. Analyzes facts to determine proper action within the limits of standard practice.
4th degree	(40)	Varied duties involving general knowledge of University policy as related to several departments. Independent judgment is required in devising new methods or modifying standard procedures to meet existing conditions
5th degree	(55)	Complex duties involving a general knowledge of University policy and procedure. Work is technical and presents new problems requiring above average ability in the field. Responsible decisions are to be made determining the administration of a Department or Budget Unit.
6th degree	(70)	Highly complex and varied duties involving the determination of University policy for a College or large Budget Unit. May direct and coordinate the work of department heads and is responsible only to the President's Office.

Factor 4

Initiative Required

This factor measures the extent of the independent decisions, recognition of problems and the creative ability required to perform the duties in a satisfactory manner.

1st degree	(5)	Employee receives detailed instructions and is expected to perform the job exactly as indicated, without deviation.
2nd degree	(10)	Requires the close following of instructions and procedures with very minor decisions made upon the basis of established precedent.
3rd degree	(20)	Employee follows an established procedure and is occasionally required to exercise independent judgment as to specific method. Plans and arranges all work referring only unusual cases to the supervisor.

4th degree	(30)	Difficult and complex type of work requiring the making of independent decisions where only general procedures are available.
5th degree	(40)	General objectives are established, but the employee is required to select a method which will accomplish the task in the most efficient manner. Supervision is not consulted unless University policy is involved.
6th degree	(50)	Position requires independent and original action in the solution of problems which would normally be the responsibility of the department heads or administrative head of a Budget Unit. Works without supervision and assumes full responsibility.

Factor 5 Responsibility for Supervising Others

This factor measures the nature of supervisory responsibility the employee is expected to assume in addition to normal work assigned, and the number of employees supervised.

1st degree	(5)	No actual supervision of others, but may occasionally show other employees how to perform certain tasks.
2nd degree	(10)	Responsible for instructing, assigning duties and maintaining the work flow of one to three workers. Supervisory decision based on precedent or policy.
3rd degree	(15)	Responsible for instructing, assigning duties and maintaining the work flow for up to ten persons usually in the same occupation or profession. Supervisory decisions related to implementation of established policy.
4th degree	(25)	Responsible for general supervision in which subordinates are responsible for close supervision of up to 20 persons. Responsible for supervisory decisions which interpret and/or implement established operational policy.
5th degree	(35)	Responsible for administrative and/or technical supervision (not line) of others, inside or outside department or unit, who are responsible for close supervision of 20 or more persons. Responsible for operational policy and control.

6th degree (50) Responsible for administrative direction of several divisions or sections involving a total of 20 or more persons. Responsible for coordinating work with that of other departments and the establishment of general policies and standards within his administrative area. Subordinates are responsible for the general supervision of divisions or sections.

Factor 6 Responsibility for Safety of Others

This factor measures the responsibility of the employee for the safety of others who can sustain physical and/or emotional injury through contact with or proximity to the functions or results of the job being rated.

1st degree	(5)	No direct responsibility for the safety of others.
2nd degree	(10)	Reasonable care with respect to own work will prevent injury to others. If such injury should occur it would be minor in nature.
3rd degree	(15)	Compliance with standard safety precautions necessary to prevent lost-time accidents, physical or emotional injury to others.
4th degree	(25)	Constant care necessary to prevent serious injury to others, due to the nature of the job.
5th degree	(35)	Safety of others frequently depends on correct action of employee or responsibility is normally shared with others. Careless or unethical conduct may result in serious injury.
6th degree	(45)	Safety of others depends entirely on correct action of employee. Carelessness or unethical conduct may result in extremely serious injuries and/or fatal accidents.

Factor 7 Contacts Required

This factor measures the responsibility for official contacts with other people. Consideration should be given to the frequency, importance, and type of information involved.

1st degree	(5)	Employee has little or no contact with others.
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2nd degree	(10)	Employee has contacts of a routine nature with other persons in the department and may have limited outside contacts by telephone.
3rd degree	(15)	The employee is required to make inter-departmental contacts by telephone, correspondence, or in person to obtain or supply factual information.
4th degree	(20)	Employee is responsible for contacts with other University departments and with the public in general in supplying specific information by telephone or in person.
5th degree	(30)	Employee is required to make frequent or regular contacts requiring a high degree of tact and technical knowledge, or the authority to make commitments concerning financial expenditure.
6th degree	(40)	The employee is required to spend a major part of his time contacting University officials or parties outside the University concerning matters which involve large sums of money or important administrative decisions.

Factor 8

Mental Effort Required

This factor measures the degree of mental effort and attention required to perform the job satisfactorily.

1st degree	(5)	Routine job requiring a minimum of mental effort.
2nd degree	(10)	Repetitive job requiring mental effort but no organization or planning.
3rd degree	(15)	Repetitive job requiring considerable mental effort with occasional organization or planning.
4th degree	(20)	Varied duties, requiring considerable mental effort and frequent organization or planning.
5th degree	(30)	Varied duties, requiring sustained mental effort with careful organization and planning.
6th degree	(40)	Highly diversified complex work requiring a high level of sustained mental effort and superior planning or organization in advance.

Factor 9

Responsibility for Errors

This factor measures the responsibility for official records, confidential information, University equipment and quality of service, considering the financial loss or embarrassment to the University resulting from errors.

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| 1st degree | (5) | Positions where error can be easily detected and could seldom result in reduced quality of service, embarrassment to the University or loss of time or money. No responsibility for confidential information. |
| 2nd degree | (10) | Positions where most of the work is subject to checks and controls, and an error would result in a minor reduction of quality of service, embarrassment to the University or loss of time or money. No responsibility for confidential information. |
| 3rd degree | (15) | Positions subject to fewer checks and controls where undetected errors definitely would reduce the quality of service, embarrass the University or result in financial loss. Limited responsibility for confidential information. |
| 4th degree | (20) | Positions where the employee may share responsibility and work may be accepted without question by others. Undetected errors would result in a marked reduction of the quality of service, embarrassment to the University or significant financial loss. Limited responsibility for confidential information. |
| 5th degree | (30) | Positions where the employee makes independent decisions which may result in disruption of services, serious embarrassment to the University or a large financial loss. Unlimited responsibility for confidential information. |
| 6th degree | (40) | Positions requiring important administrative decisions affecting the entire campus which may involve major disruption of services, extreme embarrassment to the University or a very large financial loss. Unlimited responsibility for confidential information. |

Factor 10

Physical Effort Required

This factor measures the physical effort required to perform the job satisfactorily.

1st degree	(5)	Very light physical effort required.
2nd degree	(10)	Light physical effort required involving regular work with lightweight objects.
3rd degree	(15)	Repetitive continuous physical activity required, involving the handling of light or average weight objects.
4th degree	(20)	Moderately heavy physical activity is required. Average weight objects handled with occasional heavy lifting, pushing or pulling.
5th degree	(25)	Strenuous physical labor involving heavy lifting, pushing or pulling.
6th degree	(30)	Extremely strenuous physical labor or a very difficult work position required.

Factor 11

Working Conditions

This factor appraises the environment and physical conditions under which the work is performed. Consideration is given to unpleasant or hazardous situations.

1st degree	(5)	Work is performed in a quiet office with controlled temperature and no unusual distractions.
2nd degree	(10)	Occasional exposure to one or more mildly unpleasant conditions.
3rd degree	(15)	Constant exposure to one or more mildly unpleasant conditions.
4th degree	(20)	Intermittent exposure to one or more disagreeable or hazardous conditions.
5th degree	(25)	Continuous exposure to several disagreeable conditions or hazard.
6th degree	(30)	Continuous exposure to several intensely disagreeable conditions or extreme hazard.

POINT CONVERSION TABLE

Grade	1	85 - 99
	2	100 - 114
	3	115 - 129
	4	130 - 144
	5	145 - 159
	6	160 - 174
	7	175 - 189
	8	190 - 204
	9	205 - 219
	10	220 - 234
	11	235 - 249
	12	250 - 264
	13	265 - 279
	14	280 - 294
	15	295 - 309
	16	310 - 324
	17	325 - 339

(Although some jobs evaluated higher than Pay Grade 17,
only 17 grades are recommended for use at the present time.)

Beginning Monthly Salary for Pay Grades
at University of Colorado Medical Center, 1957

Pay Grade	Beginning Monthly Salary
1	\$174
2	185
3	197
4	209
5	222
6	236
7	251
8	267
9	284
10	302
11	322
12	343
13	366
14	390
15	416
16	444
17	474